

1973 Volume 43 Annual Indexes

Horticultural abstracts



THE COMMONWEALTH BUREAU OF HORTICULTURE AND PLANTATION CROPS

EAST MALLING RESEARCH STATION,
NR. MAIDSTONE, KENT.

Staff

Director

G.E. Tidbury, B.Sc., A.R.C.S., A.I.C.T.A., F.I. Biol.

Assistant Director

D.O'D. Bourke, M.A., Dip. Agric., F.L.S.

Scientific Information Officers

Mrs. E. Ulyatt, Dip. Hort., Eisgrub

T.E. Walter, B.Sc.

Miss E.E. Hardman, M.Sc.

J.W. Jordan, M.I.L., Kew Cert.

Mrs. J.R. Llewelyn, B.Sc. Hort., Ph.D.

Mrs. M.H. Ingram, B.Sc. (part-time)

Miss J.E.K. Cox, B.Sc. Hort.

Mrs. J.M. Talboys, B.Sc., Dip.

Plant. Path. (part-time)

F.E. Theakston, B.Sc.

Miss. M.H. Blackler, B.Sc.

Consultant Director

A.F. Posnette, M.A., Sc.D., Ph.D., A.I.C.T.A., F.I. Biol., F.R.S.

The Commonwealth Bureau of Horticulture and Plantation Crops is part of the Commonwealth Agricultural Bureaux, an organization financed by the Commonwealth for the dissemination of information on agricultural research.

Horticultural Abstracts is a monthly journal prepared by the Bureau and published by the Commonwealth Agricultural Bureaux.

Annual subscription rates:

to subscribers in non-contributing countries	£35.00	\$91.00
to subscribers in contributing countries	£14.00	

Single sided copies are available at £2 extra per annual volume.

Orders and enquiries concerning subscriptions and back numbers should be sent to:

CENTRAL SALES BRANCH,
COMMONWEALTH AGRICULTURAL BUREAUX,
FARNHAM ROYAL, SLOUGH SL2 3BN, ENGLAND,

© *Commonwealth Agricultural Bureaux, 1974*. All rights reserved. No part of this publication may be reproduced in any form or by any means, electronically, mechanically, by photo-copying, recording or otherwise, without the prior permission of the copyright owner.

The Executive Council of the Commonwealth Agricultural Bureaux is a signatory to the Fair Copying Declaration, details of which can be obtained from The Royal Society, 6 Carlton House Terrace, London, S.W.1.

The Commonwealth Agricultural Bureaux organization does not accept responsibility for any trade advertisement included in this publication.

HORTICULTURAL ABSTRACTS

Volume 43



Prepared by

**Commonwealth Bureau of
Horticulture and Plantation Crops, Kent
1973**

ISSN 0018-5280

© *Commonwealth Agricultural Bureaux* 1974

All rights reserved. No part of this publication may be reproduced in any form or by any means, electronically, mechanically, by photocopying, recording or otherwise, without the prior permission of the copyright owner

The Executive Council of the Commonwealth Agricultural Bureaux is a signatory to the Fair Copying Declaration, details of which can be obtained from The Royal Society, 6 Carlton House Terrace, London, S.W.1

Published by

Commonwealth Agricultural Bureaux,
Farnham House, Farnham Royal,
SLOUGH SL2 3BN, UK

Printed by

THE CAMBRIAN NEWS, QUEEN STREET, ABERYSTWYTH, WALES, UK

CONTENTS

GENERAL ASPECTS OF RESEARCH AND ITS

Pages

APPLICATION OF THE SCIENCE OF PLANT BREEDING TO THE CULTIVATION OF FRUIT TREES AND VINES												Pages				
New periodicals	—	—	—	255	—	407	469	549	639	713	803	
Books	17	67	105	173	—	337	—	469	549	639	713	803
Yearbooks	17	—	105	173	255	337	407	—	—	639	714	—
Conference proceedings	17	—	105	—	255	337	—	—	—	639	714	—
Annual reports	17	67	106	—	255	337	—	—	—	640	714	803
Horticulture in various countries	—	—	106	174	—	—	407	—	549	—	—	803
Experimental techniques and apparatus	17	67	106	174	255	337	407	469	549	640	714	803
Breeding and selection	—	—	106	174	256	—	—	—	—	—	715	804
Propagation	—	—	106	—	256	—	—	—	549	—	715	—
Climate	18	67	106	174	—	338	408	469	549	640	—	804
Management	18	—	107	174	256	338	408	470	550	641	—	804
Greenhouses	18	68	107	174	256	338	408	470	550	641	715	804
Crop protection	18	68	107	175	256	338	408	470	550	641	715	804
Chemical residues	18	—	—	175	257	339	408	470	—	641	715	—
Morphology	18	—	—	175	—	—	—	—	—	—	—	—
Physiology and biochemistry	18	—	107	176	257	339	408	471	550	641	716	805
Reproduction	—	—	—	—	—	—	—	—	551	—	716	—
Field equipment	—	—	—	—	257	340	—	—	—	—	—	—
Handling and storage	18	—	108	176	—	—	409	—	551	—	716	805
Quality	—	—	—	—	—	340	—	471	551	—	716	—
Miscellany	—	—	108	—	257	340	409	—	551	—	—	—
TEMPERATE TREE FRUITS AND NUTS																
General																
Miscellaneous	19	68	108	176	258	340	409	471	551	641	716	806
Selection and varieties	—	—	—	—	—	341	409	—	552	—	—	807
Propagation and planting	19	—	109	—	258	341	409	—	552	642	717	807
Climate	19	—	109	176	—	341	409	—	—	—	—	—
Management	—	69	109	176	259	342	410	472	552	642	717	807
Soils and nutrition	—	69	109	—	—	—	410	472	—	—	—	—
Crop protection	19	69	110	177	259	342	—	472	—	643	717	807
Physiology and biochemistry	19	—	110	—	—	342	410	472	—	643	718	807
Reproduction	—	69	—	—	259	—	410	—	553	—	—	808
Harvesting and handling	—	69	110	177	259	342	—	472	553	—	718	808
Quality	—	—	—	—	—	—	—	—	—	—	—	—
By-products	—	—	—	—	—	—	—	—	472	553	643	718
Almonds	19	69	110	—	259	342	410	472	—	—	718	808
Apples																
General	—	—	110	177	260	342	410	472	553	643	718	808
Selection and varieties	19	69	110	177	260	343	411	—	553	643	719	808
Propagation and planting	20	70	111	178	260	343	411	473	553	644	719	809
Climate	—	—	111	178	261	344	412	473	—	644	720	810
Management	20	70	111	178	262	344	412	473	554	645	721	810
Soils and nutrition	20	70	112	179	263	345	412	474	554	646	722	812
Crop protection	21	70	113	179	263	346	413	475	555	646	722	813
Physiology and biochemistry	21	—	114	182	264	346	414	475	556	648	725	814
Reproduction	22	71	—	183	265	347	414	476	557	649	726	815
Harvesting and handling	22	71	115	184	265	347	415	476	557	649	726	816
Quality	22	72	—	185	265	348	415	477	558	650	727	817
By-products	—	—	—	—	267	—	—	—	—	—	—	—
Apricots	23	72	117	185	267	348	415	478	558	651	727	817
Cherries	23	72	117	185	267	349	415	478	559	652	728	818
Chestnuts	24	—	118	—	269	—	—	479	559	—	—	819
Cobnuts and hazels	—	73	—	—	269	350	—	479	—	653	728	819
Figs	24	—	—	185	269	350	—	—	—	—	729	820
Mulberries	—	—	118	186	—	—	—	479	—	—	729	820
Peaches and nectarines	24	73	118	186	269	350	416	479	559	653	729	820
Pears	24	74	120	187	270	352	418	480	561	654	731	821
Pecans and hickories	25	74	121	188	270	354	—	481	562	656	731	822
Pistachios	—	—	121	—	—	354	—	482	—	656	—	—
Plums, prunes and damsons	25	74	121	188	271	354	420	482	562	656	732	822
Quinces	—	—	—	189	271	—	420	—	562	657	733	822
Walnuts	25	75	121	—	271	355	420	482	—	657	733	823
Sundry crops	—	—	121	—	272	—	420	—	—	—	733	—
SMALL FRUITS AND VINES																
General	26	—	122	189	272	355	420	483	563	657	734	823
<i>Actinidia</i> species	26	75	122	—	—	—	421	483	—	—	—	—
Currants	26	75	122	190	272	355	421	483	563	657	734	823
Gooseberries	—	75	122	—	273	356	422	—	563	658	735	—
Minor <i>Ribes</i> species	—	—	—	—	—	—	—	—	—	—	—	—
Blackberries	—	—	122	—	—	—	422	—	—	—	735	—
Raspberries	—	75	122	190	273	356	422	484	563	658	735	824
Minor <i>Rubus</i> species	—	75	123	—	—	—	—	—	564	—	735	—
<i>Vaccinium</i> species	26	75	123	190	274	356	423	484	—	659	736	824
Strawberries	26	75	124	191	274	357	423	485	564	659	736	824
Vines																
General	27	77	124	192	275	358	424	485	564	661	738	827
Selection and varieties	—	77	124	192	275	359	424	485	565	661	738	827

SMALL FRUITS AND VINES (continued)

Propagation and planting	...	...	—	77	124	193	275	359	424	—	565	661	739	827
Climate	...	...	—	77	126	—	—	359	424	485	565	662	740	828
Management	...	...	—	78	126	193	275	359	425	485	566	662	740	828
Soils and nutrition	...	...	—	78	126	194	276	360	—	487	567	664	740	829
Crop protection	...	...	27	78	126	194	276	360	425	487	568	665	740	829
Physiology and biochemistry	...	...	—	80	126	195	277	361	—	488	569	665	742	830
Reproduction	...	...	—	80	128	—	277	361	425	488	569	666	742	831
Harvesting and handling	...	...	—	81	128	—	—	362	426	489	570	666	743	—
Quality	...	...	—	81	128	196	277	362	426	489	570	666	743	—
By-products	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Sundry crops	...	...	—	—	—	196	—	—	426	—	570	—	—	831
VEGETABLES, TEMPERATE, TROPICAL AND GREENHOUSE														
General	...	...	27	81	128	197	278	362	426	489	570	666	743	831
Chenopodiaceae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Red beet	...	...	28	82	130	199	279	—	429	491	572	—	745	833
Spinach	...	...	28	82	—	199	279	365	429	—	572	668	745	833
Spinach beet	...	...	—	—	—	—	279	—	—	491	572	—	—	833
Compositae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Artichokes (jerusalem)	...	...	29	—	130	199	279	365	429	492	—	668	745	833
Artichokes (globe)	...	...	—	—	—	—	—	365	429	—	572	—	—	—
Cardoons	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Chicory	...	...	29	—	130	—	279	365	—	492	573	—	745	833
Endive	...	...	—	—	—	—	—	—	429	492	573	—	—	834
Lettuce	...	...	29	82	130	199	279	365	430	492	573	668	745	834
Salsify	...	...	29	—	—	—	—	—	—	—	573	—	—	—
Scorzonera	...	...	—	—	131	—	—	—	431	—	574	—	747	—
Other composites	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Cruciferae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Brassicas	...	...	30	82	131	201	280	366	431	492	574	668	747	834
Cress	...	...	—	—	—	—	281	—	—	—	—	—	749	836
Radishes	...	...	31	83	133	201	281	368	432	493	575	669	749	836
Watercress	...	...	—	—	—	201	—	368	—	—	—	—	—	—
Cucurbitaceae	...	...	31	83	133	202	281	368	432	494	576	670	750	837
Leguminosae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Beans (<i>Phaseolus</i>)	...	...	—	—	—	—	—	—	—	—	—	—	—	—
General	...	...	32	—	—	—	—	—	—	—	578	—	751	839
Selection and varieties	...	...	32	85	135	203	—	370	434	496	578	672	751	840
Propagation and planting	...	...	—	85	135	203	283	370	434	496	578	673	752	840
Climate	...	...	—	85	135	204	283	370	—	—	—	673	—	840
Management	...	...	32	85	—	204	—	370	434	497	—	673	752	840
Soils and nutrition	...	...	32	—	—	204	283	370	435	497	579	673	752	—
Crop protection	...	...	32	85	135	204	283	371	435	497	579	673	752	841
Physiology and biochemistry	...	...	33	86	136	205	283	371	435	498	579	674	752	841
Reproduction	...	...	35	—	—	—	—	—	—	—	—	—	754	—
Harvesting and handling	...	...	—	—	136	206	—	372	—	499	—	—	—	842
Quality	...	...	—	—	—	206	—	—	—	499	580	—	754	—
Beans (<i>Vicia</i>)	...	...	35	86	136	206	284	372	436	499	581	674	754	842
Beans (<i>Cyamopsis</i>)	...	...	35	—	—	—	284	373	—	499	—	674	—	—
Peas	...	...	35	86	136	206	285	373	437	499	581	674	754	843
Other genera	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Liliaceae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Asparagus	...	...	—	86	138	209	286	374	438	501	582	—	—	844
Garlic	...	...	37	87	138	—	—	375	439	501	582	—	—	845
Leeks	...	...	37	87	138	—	286	375	439	501	583	676	—	845
Onions	...	...	37	87	138	209	286	375	439	502	583	676	755	845
Other <i>Allium</i> species	...	...	—	—	139	—	—	—	—	503	584	—	—	846
Malvaceae — Okra	...	...	38	87	139	210	287	376	439	503	—	677	756	846
Polygonaceae — Rhubarb	...	...	38	—	139	—	287	—	—	503	—	—	756	846
Solanaceae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Capsicums	...	...	38	87	139	210	287	376	439	503	584	677	757	846
Eggplants	...	...	38	87	140	211	288	377	441	504	585	678	757	847
Tomatoes	...	...	—	—	—	—	—	—	—	—	—	—	—	—
General	...	...	38	—	—	211	288	—	—	504	585	—	—	847
Selection and varieties	...	...	—	88	140	212	289	377	441	504	585	678	757	847
Propagation and planting	...	...	38	88	140	212	289	378	441	505	585	678	757	848
Climate	...	...	—	88	—	—	—	—	—	505	586	—	—	848
Management	...	...	—	88	141	212	289	378	442	505	586	679	758	848
Soils and nutrition	...	...	38	89	141	—	289	378	442	505	587	679	759	848
Crop protection	...	...	38	89	141	213	290	378	442	505	588	680	759	849
Physiology and biochemistry	...	...	39	89	142	213	291	379	—	506	589	680	761	850
Reproduction	...	...	40	—	142	214	291	380	444	507	—	681	—	851
Harvesting and handling	...	...	—	89	—	214	291	380	444	507	590	681	761	851
Quality	...	...	40	—	143	214	291	—	444	507	590	682	761	852
Umbelliferae	...	...	—	—	—	—	—	—	—	—	—	—	—	—
Carrots	...	...	40	89	143	214	292	380	444	507	590	682	761	852
Parsnips	...	...	—	—	—	—	292	—	—	—	591	—	—	—
Celery	...	...	—	90	143	215	—	380	444	508	591	683	762	852
Celeriac	...	...	—	—	—	—	292	380	—	—	591	—	—	—
Sundry crops	...	...	—	90	—	—	293	—	—	—	591	683	762	853
Mushrooms	...	...	40	90	143	215	293	380	445	508	591	683	762	853
ORNAMENTAL PLANTS														
General	...	...	40	90	144	216	293	381	445	509	592	684	764	854
Propagation and nursery management	...	...	41	91	145	217	294	381	446	509	593	684	764	855
Weed control and plant protection	...	...	—	91	145	218	—	381	446	509	—	—	764	856
Carnations	...	...	41	91	145	218	294	—	446	509	593	684	764	856
Chrysanthemums	...	...	41	92	145	219	295	382	447	510	594	685	765	857

ORNAMENTAL PLANTS (continued)

Geraniums or pelargoniums	...	...	...	42		220	296	382	448	510	595	686	766	858
Gerberas	...	...	...		92	145	220	296	382	—	—	686	766	—
Morning glories	...	...	...			146	220	—	382	448	—	595	—	766
Petunias	...	...	...	42	92	146	221	296	382	448	—	595	686	767
Primulas	...	...	...						448	511	595	—	—	—
Snapdragons	...	...	...			146	221	296	383	—	511	—	686	767
Other annual and herbaceous plants	...	...	...		92	146	221	296	383	448	511	595	687	767
Bulbs, tubers, etc. general	...	...	...			147	222	297	383	—	—	596	—	859
Anemones	...	...	...				222	—	—	—	—	—	—	—
Begonias	...	...	...	43	93	147	222	—	—	449	512	596	687	860
Crocuses	...	...	...				223	—	384	449	—	—	—	—
Cyclamen	...	...	...				223	—	384	449	512	597	688	769
Dahlias	...	...	...				223	—	384	449	—	—	769	861
Freerias	...	...	...				223	—	384	—	—	—	688	769
Gladioli	...	...	...	43	147	224	297	384	449	512	597	688	769	861
Gloxinias	...	...	...				297	—	—	—	598	688	—	861
Hyacinths	...	...	...	43			225	297	—	449	—	—	688	—
Irises	...	...	...	43		148	225	—	384	449	512	598	—	862
Lilies	...	...	...		93	148	225	297	384	450	512	598	688	770
Narcissi	...	...	...		93		226	—	384	450	—	598	689	770
Nerines	...	...	...						384	—	513	598	—	770
Tulips	...	...	...	43	93	148	226	298	385	450	513	598	689	770
Other bulbs, tubers, etc.	...	...	...	44	93	148	227	299	385	450	514	599	689	771
Lawns and other turf	...	...	...	44	94	148	227	299	385	451	514	599	689	771
Aquatic plants	...	...	...					300	—	—	—	—	—	—
Bromeliads	...	...	...	44		149	—	—	—	451	515	599	—	773
Other foliage and succulent plants	...	...	...	44	94	149	227	300	387	451	—	599	690	773
Orchids	...	...	...	45		149	228	300	387	452	515	600	690	773
Trees and shrubs — general	...	...	...	45	94	149	228	300	388	452	—	601	690	773
Bougainvilleas	...	...	...	45				300	—	452	—	—	—	774
Camellias	...	...	...	45		150	—	301	—	452	—	—	691	—
Conifers	...	...	...	45		150	228	301	388	452	515	601	691	—
Heathers	...	...	...				228	—	—	—	—	—	—	—
Hollies	...	...	...				229	301	388	452	—	601	691	866
Ivies	...	...	...						389	—	516	601	—	866
Jasmines	...	...	...						—	516	—	—	—	—
Lilacs	...	...	...						—	516	—	—	—	—
Magnolias	...	...	...						453	516	—	691	774	—
Poinsettias	...	...	...			150	229	301	389	453	—	601	—	866
Rhododendrons and azaleas	...	...	...		94		229	301	389	453	516	602	692	774
Roses	...	...	...	45	94	150	230	301	389	454	516	602	692	774
Other trees and shrubs	...	...	...	46	95	151	231	302	390	454	517	603	692	775

MINOR TEMPERATE AND TROPICAL

INDUSTRIAL CROPS

General	...	...	...	46	95	—	—	303	390	—	—	604	694	776
Condiments and spices	...	...	...	46	95	151	232	303	391	455	518	604	694	776
Dyes	...	...	...	47	95	—	—	304	391	—	518	605	—	—
Essential oils	...	...	...	47	95	152	232	304	391	456	518	605	695	777
Hard fibres	...	...	...						392	—	519	606	—	778
Hops	...	...	...	47		152	233	305	392	457	519	606	696	778
Insecticidal plants	...	...	...		96	153	233	305	—	457	—	—	—	778
Medicinal plants	...	...	...	48	96	153	233	306	393	457	519	607	696	779
Perennial fatty oil plants	...	...	...	48	97	—	235	308	394	—	—	—	—	782
Sundry plants	...	...	...	49	97	155	—	308	—	458	521	609	698	782

SUB-TROPICAL FRUIT AND PLANTATION

CROPS

General	...	...	...	49		155	236	—	394	459	521	610	698	782
Avocados	...	...	...	49	97	155	236	308	394	459	521	610	698	782
Carobs	...	...	...					308	394	—	—	—	—	—
Citrus	...	...	...								
General	...	...	...	49	97	156	236	309	—	459	521	—	—	783
Selection and varieties	...	...	...		97	—	—	309	394	459	521	610	698	783
Propagation and planting	...	...	...		98	156	236	309	394	459	522	610	698	783
Climate	...	...	...			156	236	309	394	459	522	610	699	—
Management	...	...	...			157	—	309	395	459	522	611	699	783
Soils and nutrition	...	...	...		98	157	236	309	395	459	522	611	699	784
Crop protection	...	...	...	49	98	158	237	310	396	459	522	611	700	784
Physiology and biochemistry	...	...	...			158	238	312	396	—	523	612	700	785
Reproduction	...	...	...	49	98	159	238	312	396	461	523	612	701	785
Harvesting and handling	...	...	...	50	98	159	238	313	396	461	524	613	701	786
Quality	...	...	...	50	99	159	239	313	398	461	524	613	701	786
By-products	...	...	...	50	99	160	—	314	398	—	524	613	—	787
Dates	...	...	...		99	160	239	314	—	461	524	614	702	787
Feijoas	...	...	...	50				314	—	—	—	—	702	787
Litchis	...	...	...	50	99	160	—	—	398	461	525	614	—	787
Longans	...	...	...					314	—	—	—	—	—	—
Loquats	...	...	...		99	—	—	—	—	461	525	—	—	—
Macadamias	...	...	...	50		160	240	—	—	462	525	614	702	787
Olives	...	...	...		99	160	240	314	398	462	525	614	702	787
Passion fruit	...	...	...			160	241	—	—	462	—	—	702	—
Persimmons	...	...	...		100	161	241	315	398	462	525	—	702	788
Pomegranates	...	...	...	50		161	241	—	398	462	—	—	—	788
Prickly pears	...	...	...		100	161	—	—	—	525	—	—	—	—
Tamarillos	...	...	...			161	—	—	—	—	—	—	—	880
Tung	...	...	...				241	315	—	462	—	—	702	788
Sundry crops	...	...	...						—	—	525	614	—	788

TROPICAL FRUIT AND PLANTATION CROPS

General	...	...	...	...	...	50	100	161	241	315	398	462	526	615	702	788	880
Annona species	...	...	...	...	...	—	—	161	241	315	—	—	—	—	—	—	—
Arecanuts	...	...	...	...	...	—	—	161	—	315	—	462	—	—	703	—	881
Bananas and abaca	...	...	...	...	...	50	100	161	241	315	399	462	526	615	703	788	881
Cacao	...	...	...	...	...	51	101	162	242	316	400	463	526	615	703	789	881
Cashews	...	...	...	...	...	—	—	—	—	—	400	464	—	616	704	—	882
Coconuts	...	...	...	...	...	51	101	163	242	316	400	464	527	616	704	789	882
Coffee	...	...	...	...	...	51	101	164	242	317	400	464	527	616	704	790	883
Cola	...	...	...	...	...	—	—	—	—	—	401	—	—	—	705	791	—
Guavas	...	...	...	...	...	52	101	166	243	318	401	—	528	—	—	791	884
Mangoes	...	...	...	...	...	52	101	166	243	318	401	465	528	617	705	791	884
Oil palms	...	...	...	...	...	—	—	101	166	243	401	465	528	617	705	791	885
Papaws	...	...	...	...	...	52	102	167	243	321	402	466	—	617	706	792	886
Pineapples	...	...	...	...	...	52	102	167	244	321	402	466	529	617	706	792	886
Rubber	...	...	...	...	...	—	—	168	244	321	402	466	529	618	707	792	886
Sapodilla	...	...	...	...	...	—	—	—	244	—	403	—	529	618	—	—	887
Sugar cane	...	...	...	...	...	—	—	—	—	—	403	466	529	618	707	793	887
General	...	...	...	...	...	—	—	—	—	—	403	466	529	618	707	793	887
Selection and varieties	...	...	...	...	...	52	102	168	244	322	403	466	529	618	707	793	888
Propagation and planting	...	...	...	...	...	—	—	168	—	—	403	—	—	618	—	794	888
Climate	...	...	...	...	...	52	102	—	—	—	403	—	529	—	708	795	889
Management	...	...	...	...	...	52	—	168	244	322	403	466	529	619	708	795	889
Soils and nutrition	...	...	...	...	...	53	—	168	—	322	403	466	—	619	—	796	890
Crop protection	...	...	...	...	...	54	102	169	244	322	404	467	530	619	708	797	890
Physiology and biochemistry	...	...	...	...	...	54	—	170	245	—	404	—	—	620	709	799	891
Reproduction	...	...	...	...	...	—	—	170	—	—	—	—	—	—	—	800	891
Harvesting and handling	...	...	...	...	...	54	—	170	245	322	404	467	530	620	709	800	892
Quality	...	...	...	...	...	—	—	171	—	322	—	—	530	—	710	800	892
By-products	...	...	...	...	...	—	—	—	—	—	—	—	530	—	710	—	—
Tea	...	...	...	...	...	—	102	171	245	322	404	467	530	620	710	801	892
Ziziphus species	...	...	...	...	...	—	103	—	245	324	—	—	531	—	—	—	893
Sundry crops	...	...	...	...	...	55	103	171	245	324	405	468	531	622	711	802	893
AUTHOR INDEX	...	...	...	...	...	895	...	...	...	...	...	...	...	...	...	...	...
SUBJECT INDEX	...	...	...	...	...	933	...	...	...	...	...	...	...	...	...	...	...
List of Journals scanned	...	...	...	...	...	1135	...	...	...	...	...	...	...	...	...	...	...

SYMBOLS FOR UNITS

Symbol	Unit or Prefix	Symbol	Unit or Prefix	Symbol	Unit or Prefix
a	are	g	gramme	μbar	microbar
A	ampere	G	giga-	min	minute (time)
Å	angstrom	gal	gallon	mol	mole
atm	standard atmosphere	h	hecto-	n	nano-
Btu	British thermal unit	h	hour	Ω	ohm
bu	bushel	hp	horsepower	oz	ounce
c	centi-	hz	hertz	p	pico-
°C	degree Celsius	in	inch	pt	pint
cal	calorie	J	joule	q	quintal
cd	candela	k	kilo-	qt	quart
Ci	curie	l	litre	R	Roentgen
ctl	cental	lb	pound	rad	rad (amount of
cwt	hundredweight	lbf	pound-force		absorbed radiation
d	deci-	lm	lumen	s	second (time)
da	deca-	lx	lux	t	tonne (metric ton)
erg	erg	m	metre	T	tera-
f	femto-	m	milli-	ton	ton
°F	degree Fahrenheit	mbar	millibar	V	volt
fl oz	fluid ounce	M	mega-	W	watt
ft	foot	μ	micro-	yd	yard

SYMBOLS FOR LANGUAGES

Af	Afrikaans	Fi	Finnish	Nl	Dutch and Flemish
Ar	Arabic	Fr	French	No	Norwegian
Be	Belorussian	Gr	Greek	Pl	Polish
Bg	Bulgarian	He	Hebrew	Pt	Portuguese
Ch	Chinese	Hu	Hungarian	Ro	Romanian
Cs	Czech	In	Indonesian	Ru	Russian
Da	Danish	It	Italian	Sh	Serbo-Croat
De	German	Ja	Japanese	Sk	Slovak
Ee	Estonian	Ko	Korean	Sn	Slovene
En	English	Li	Lithuanian	Sv	Swedish
Eo	Esperanto	Lv	Latvian	Tr	Turkish
Es	Spanish	Ma	Macedonian	Uk	Ukrainian

Symbols with capitals represent the language of the paper; symbols without capitals the summaries.

CAB

The Commonwealth Agricultural Bureaux (CAB), a co-operative venture established by the Commonwealth, provides the only comprehensive information service for agricultural research workers. This is based on a series of 19 abstract journals which cover the whole range of agricultural science. These journals have a large, world-wide readership.

Other services provided by CAB include:

bibliographies, with or without annotations.

review articles.

publication of technical monographs, some of which are standard works.

answering enquiries arising from any aspect of agricultural science (charges being made where extensive research is required).

photocopies.

provision of identification services for entomologists, mycologists and helminthologists.

control of animal and plant pests by their natural enemies (i.e. biological control services)

The work of CAB is largely carried out through a number of Institutes and Bureaux, each dealing with a particular aspect of agricultural science. The abstract journals are produced using computer methods, and the whole data base, from the beginning of 1973 onwards, is in computer-readable form. Experimental tapes covering the field of animal health are already available; tapes for other subject areas will become so progressively.

Enquiries should be sent as follows, to the addresses listed below:-

- (i) any aspect of agricultural science — to the appropriate Institute or Bureau Director.
 - (ii) the computerized system, magnetic tapes, or services arising therefrom — to the Systems Manager, Farnham House.
 - (iii) CAB publications — to Central Sales Branch, Farnham House.
 - (iv) general or administrative matters — to the Secretary, Farnham House.
- Liaison Officers in the member countries welcome comments, suggestions or enquiries on CAB services.

Institutes

Commonwealth Institute of Entomology, 56 Queen's Gate, London SW7 5JR

Director: R.G. Fennah, ScD, MA, AICTA, FIBiol.

Commonwealth Mycological Institute, Ferry Lane, Kew Richmond TW9 3AF

Director: A. Johnston, BSc, AICTA, FIBiol.

Commonwealth Institute of Biological Control, Gordon Street, Curepe, Trinidad, West Indies

Director: F.J. Simmonds, MA, PhD, DSc, FRSA.

Commonwealth Institute of Helminthology, The White House, 103 St. Peter's Street, St. Albans, Herts.

Director: Miss S.M. Willmott, PhD, FIBiol.

Bureaux

Agricultural Economics, Dartington House, Little Clarendon Street, Oxford OX1 2HH

Director: J.O. Jones, MA.

Animal Breeding and Genetics, Animal Breeding Research Organization, The King's Buildings, West Mains Road, Edinburgh EH9 3JX

Director: J.D. Turton, BSc, MRCVS, DTVM.

Animal Health, Central Veterinary Laboratory, New Haw, Weybridge, Surrey

Director: M.R. Dhanda, LVP, MS, DipBact.

Dairy Science & Technology, National Institute for Research in Dairying, Shinfield, Reading RG2 9AT

Director: E.J. Mann, NDD, CDD.

Forestry, Commonwealth Forestry Institute, South Parks Road, Oxford OX1 3RD

Director: P.G. Beak, MBE, MA.

Horticulture & Plantation Crops, East Malling Research Station, Nr. Maidstone, Kent.

Director: G.E. Tidbury, BSc, ARCS, AICTA, FIBiol.

Nutrition, Rowett Research Institute, Bucksburn, Aberdeen AB2 9SB.

Director: Miss D.L. Duncan, BSc, PhD.

Pastures & Field Crops, Hurley, Maidenhead SL6 5LR.

Director: P.J. Boyle, MA

Plant Breeding & Genetics, Department of Applied Biology, Downing Street, Cambridge CB2 3BX

Director: R.H. Richens, MA, PhD.

Soils, Rothamsted Experimental Station, Harpenden AL5 2JQ

Director: W.D. Brind, BScAgr.

Headquarters, Central Sales Branch and Systems Group

Farnham House, Farnham Royal, Slough SL2 3BN. UK

Secretary, CAB: E.A. Runacres

Systems Manager: G.A. Somerfield, MA, BSc, DPhil

Finance and organization

CAB's finance comes from the income from the sale of its journals and other services and from contributions made by each of the member countries, according to a formula agreed from time to time by those members.

The organization is controlled by an Executive Council composed of nominees of the various Commonwealth Governments, including one for the Dependent Territories. On the following pages is shown a list of the present members of the Executive Council, together with the names of the Liaison Officers, who form the primary link in the member countries.

EXECUTIVE COUNCIL

(as at 1 January, 1974)

<i>Member</i>	<i>Representing</i>
R.D. CROLL (Chairman)	Australia
T.N. TANDON (Vice-Chairman)	India
G.M.P. MYERS,	United Kingdom
J.W. GREENWOOD	Canada
V. ARMSTRONG, PhD.	New Zealand
P.M.D. FERNANDO	Sri Lanka
Mrs. A.Y. AGGREY-ORLEANS	Ghana
M. SANI	Malaysia
U.K. BELLO	Nigeria
(To be nominated)	Cyprus
H.E. THE HIGH COMMISSIONER	Sierra Leone
(To be nominated)	Tanzania
THE DEPUTY HIGH COMMISSIONER	Jamaica
P. HEZEKIAH	Trinidad & Tobago
N.K. IRUMBA	Uganda
H.E. THE HIGH COMMISSIONER	Kenya
M.V. PHIRI	Malawi
(To be nominated)	Zambia
B.A. BALDEH	The Gambia
R.E. CHANDISINGH	Guyana
H.E. THE HIGH COMMISSIONER	Botswana
THE DEPUTY HIGH COMMISSIONER	Barbados
B. APPADOO	Mauritius
R.M. MOTSA	Swaziland
K.R. BAIN	Fiji
D.M. KITCHING	Dependent Territories

D.G. THOMAS, Secretary, Commonwealth Scientific Committee (Observer)

E.A. RUNACRES (Secretary)	Farnham Royal, Slough, SL2 3BN
---------------------------	-----------------------------------

LIAISON OFFICERS

<i>Contributing country</i>	<i>Liaison Officer</i>	<i>Address</i>
United Kingdom	Under Secretary	Agricultural Research Council, 160, Great Portland Street, London W1N 6DT
Canada	G.M. Carman, BSA, MSc, PhD.	Director, Information Division, Administration Branch, Canada Department of Agriculture, 1105, Sir John Carling Building, Ottawa, Ontario, K1A 0C7
Australia	P.F. Butler, MAgSc.	Assistant Secretary, (Agricultural & Biological Sciences) Commonwealth Scientific and Industrial Research Organization, PO Box 225, Dickson, A.C.T.2602.
New Zealand	I.L. Baumgart, BA, BSc.	Assistant Director-General, Department of Scientific and Industrial Research, Private Bag, Wellington.
India	M.S. Swaminathan, BSc, BScAgr, PhD, AIARI, FNI	Director-General, Indian Council of Agricultural Research, Krishi Bhavan, New Delhi 1.
Sri Lanka	J.W.L. Peiris, PhD, DIC, DipAgr.	Deputy Director of Agriculture (Research) Central Agricultural Research Institute, Gannoruwa, Peradeniya.
Ghana	General Secretary	Council for Scientific and Industrial Research, PO Box M.32, Accra

Malaysia	Permanent Secretary	Ministry of Agriculture and Co-operatives, Swettenham Road, Kuala Lumpur.
Nigeria	Secretary	Agricultural Research Council of Nigeria, Private Mail Bag 5382, Moor Plantation, Ibadan.
Cyprus	R. Chr. Michaelides, BScAgr, NDA, DipAgrEc.	Director-General, Ministry of Agriculture and Natural Resources, Nicosia.
Sierra Leone	Research Co-ordinator	Njala University College, Njala.
Tanzania	Director of Agriculture	PO Box 9071, Dar-es-Salaam.
Jamaica	L.E. McLaren, BSc, MRCVS, PhD, MIBiol.	Technical Officer, Ministry of Agriculture, PO Box 480, Kingston 6.
Trinidad & Tobago	Chief Technical Officer (Agriculture)	Ministry of Agriculture, Lands and Fisheries, St. Clair Circle, Port-of-Spain, Trinidad.
Uganda	Commissioner of Agriculture	Ministry of Agriculture, Forestry and Co-operatives, Department of Agriculture, PO Box 2, Entebbe.
Kenya	Under Secretary	Ministry of Agriculture, PO Box 30028, Nairobi.
Malawi	P. Brown, BA, DTA.	Chief Agricultural Research Officer, Ministry of Agriculture, PO Box 303, Zomba.
Zambia	Permanent Secretary	Ministry of Rural Development, PO Box RW.197, Lusaka.
The Gambia	L.J. Marenah, BScAgr, PhD, DipAgr, DTA.	Director of Agriculture, Department of Agriculture, Cape St. Mary.
Guyana	H.A.D. Chesney	Principal Agricultural Officer (Research) Ministry of Agriculture and Natural Resources, Central Agricultural Station, Mon Repos, East Coast Demerara.
Botswana	The Permanent Secretary	Ministry of Agriculture, Private Bag 3, Gaborone.
Barbados	Chief Agricultural Officer	Ministry of Agriculture, Commerce, Science and Technology, Crumpton Street, Bridgetown.
Mauritius	B.D. Roy	Chief Agricultural Officer, Agricultural Services, Reduit.
Swaziland	O.Z. Dhlamini	Under Secretary, Office of Permanent Secretary, Ministry of Agriculture, PO Box 162, Mbabane.
Fiji	Secretary	Agriculture, Fisheries and Forests, Suva.
Dependent Territories	A.R. Melville, CMG, BSc, AICTA	Agricultural Adviser, Overseas Development Administration, Eland House, Stag Place, London, SW1E 5DH
Republic of Ireland	J.C. Doherty, BL.	Assistant Principal Officer, Department of Agriculture and Fisheries (Development Division), Upper Merrion Street, Dublin 2.

COMMONWEALTH BUREAU OF HORTICULTURE AND PLANTATION CROPS

EAST MALLING RESEARCH STATION,
NR. MAIDSTONE, KENT.

Staff

Director

G.E. Tidbury, B.Sc., A.R.C.S., A.I.C.T.A., F.I. Biol.

Assistant Director

D. O'D. Bourke, M.A., Dip.Agric., F.L.S.

Scientific Information Officers

Mrs. E. Ulyatt, Dip.Hort., Eisgrub.

T.E. Walter, B.Sc.

Miss E.E. Hardman, M.Sc.

J.W. Jordan, M.I.L., Kew Cert.

Mrs. J.R. Llewelyn, B.Sc.Hort., Ph.D. (part-time)

Mrs. M.H. Ingram, B.Sc. (part-time)

Miss J.E.K. Cox, B.Sc.Hort.

F.E. Theakston, B.Sc.

Miss M.H. Blackler, B.Sc.

P.S. Matthews, B.Sc.

Consultant Director

A.F. Posnette, M.A., Sc.D., Ph.D., A.I.C.T.A., F.I.Biol., F.R.S.

ERRATA

(lines are counted from the beginning of the bibliographic data in each item.)

Volume 43

Page	Abstract	Line	
17	7	3	for 'Africal' read 'African'
19	30	3	for 'Biolgy' read 'Biology'
19	33	6	for 'almonds' read 'in almonds'
22	57	4	for 'Gartenbausissenschaft' read 'Gartenbauwissenschaft'
24	81	6	for 'tricylohexyltin hydroxide' read '(tricylohexyltin hydroxide)'
27	115	1	for 'AVALL' read 'ÅVALL'
28	128	11	for 'annus' read 'annuus'
32	164	17	for 'abst. 15' read 'abst. 151'
38	236	1	for 'SPALDON' read 'SPALDON'
42	278	7	for 'mg/ml' read 'µg/ml'
43	293	1	for 'REPP0, E.' read 'REPP0, È'
43	296	1	for 'BEIJERSBERGER' read 'BEIJERSBERGEN'
44	300	2	for 'VIYAYAN' read 'VIVAYAN'
100	816	11	for '2.51' read '2.5 litres'
110	915	5	for 'Es' read 'Pt'
200	1968	13	for 'NH ₄ +' read 'NH ₄ +'
237	2394	8	for ' <i>Rotylenchus reniformis</i> ' read ' <i>Rotylenchulus reniformis</i> '
309	3100	6	for ' <i>Pomicirus</i> ' read ' <i>Poncirus</i> '
320	3237	1	for 'KAOHRU' read 'KACHRU'
320	3241	1	for 'KAOHRU' read 'KACHRU'
342	3359	4	for ' <i>Növényvédelem</i> ' read ' <i>Növényvédelem</i> '
342	3361	6	for 'rising' read 'original'
346	3406	2	for 'various' read 'virus'
373	3739	7	for '12.8/3.5°C 35/26.7°' read '12.8/4.5°C to 35/26.7°'
384	3873	3/4	for 'Instituut von Plantenzicktenkundig Ouderzoek' read 'Instituut voor Plantenziektenkundig Onderzoek'
386	3895	17	for 'lies' read 'lines'
390	3925	2	for 'wood' read 'woody'
401	4064	3	for 'Ew' read 'En'
401	4064	5/6	for 'the preceding abstract' read 'HcA 43, 1592'
408	4140	3	for 'systemaischen' read 'systemischen'
412	4186	8	for '14.5°' read '14.5°C'
414	4218	6	for 'ethylenethiorourea' read 'ethylenethiourea'
415	4234	25	for 'incisa' read 'incisa'
416	4240	5	for 'Phenolysynthese' read 'Phenolsynthese'
420	4290	4	for 'Restinevodstva' read 'Rastenievodstva'
421	4297	2	for 'RILLAR' read 'RILLAAR'
421	4307	1	for 'ADASKALĬTSĭĭ' read 'ADASKALĬTSĭĭ'
422	4309	7	for 'compound' read 'compounds'
426	4358	3	for '4' read '34'
428	4382	4	for 'Bedrÿfson twikkeling' read 'Bedrijfsontwikkeling'
432	4428	4	for 'brassicae' read 'brassicae'
432	4438	1	for 'RENVALI' read 'RENVALL'
432	4438	5	for 'best results' read 'best results were obtained'
435	4472	6	for '(BMPV)' read '(BPMV)'
435	4479	2	for ' <i>phaseolus</i> ' read ' <i>Phaseolus</i> '
437	4502	1	for 'Puirification' read 'Purification'
440	4532	4	for 'annum' read 'annuum'
440	4539	2	for 'aacriens' read 'acariens'
445	4600	5	for 'di' read 'identificazione di'
445	4601	15	for 'sporcarp' read 'sporocarp'
445	4602	2	for '3,6' read '3 (6) 823-826'
447	4630	8	for 'few' read 'few hours'
448	4634	2	for 'Patholology' read 'Pathology'
448	4641	1	for ' <i>Gaillardia aristata</i> ' read ' <i>Gaillardia aristata</i> '
453	4699	1	insert 'DENMARK'
455	4725	11	for ' <i>saragentii</i> ' read ' <i>sargentii</i> '
456	4744	10	after hybrid <i>M.</i> insert ' <i>lavenduliodera</i> '
462	4826	5	for 'Rhyde' read 'Ryde'
463	4844	5	for 'amelondado' read 'amelonado'
465	4869	1	for ' <i>Nodulisporium</i> ' read ' <i>Nodulisporium</i> '
466	4884	3	for 'açúcar' read 'açúcar'
467	4889	2	for 'açácar' read 'açúcar'
467	4901	9	for 'and' read 'the'
468	4910	2	for 'XI' read 'IX'

Page	Abstract	Line	
473	4957	3	for 'statification' read 'stratification'
474	4970	8	for 'Shteifling' read 'Shtreifling'
485	5096	4	for 'Botrytis' read 'Botrytis'
488	5140	3	for 'vinifera' read 'vinifera'
499	5271	7	for 'leguminosarum' read 'leguminosarum'
501	5297	6	for 'sativum' read 'sativum'
504	5328	4	for 'gloeosporioides' read 'gloeosporioides'
506	5357	6	for 'plants sprayed' read 'plants were sprayed'
512	5424	5	for 'Bloebollenonderzoek' read 'Bloembollenonderzoek'
518	5486	4	for 'Hance' read 'Hance'
518	5489	3	for 'form' read 'form'
518	5500	5	for 'arvensis' read 'arvensis'
520	5523	2	for 'caucasica' read 'caucasica'
521	5536	2	for 'α-BHC' read 'γ-BHC'
521	5547	3	for '362' read 'No. 362'
524	5574	12	for 'citri' read 'citri'
526	5611	2	for 'cacao' read 'cacao'
529	5652	4	for '80' read 'No. 80'
549	5676	5	for '2-component' read '2-component plant'
592	6124	8	for 'originating' read 'The <i>Pleurotus</i> strain designated <i>P. Florida</i> FovoSe originating'
614	6373	9	for 'chloropane' read 'chloropropane'
645	6546	10	for 'after thinning and shortening' read 'after pruning, thinning and shortening'
645	6547	1	add 'TESIC, M.' as second author
650	6589	11	for 'stability' read 'storability'
651	6601	19	for 'String of green fruit' read 'Storage of green fruit'
677	6882	1	for 'information' read 'infection'
679	6903	7	for 'weed diphenamid,' read 'weed control in'
717	7314	13	for 'peach and' read 'peach and Early Italian prune.'
724	7392	12	for 'herparana' read 'heparana'
724	7392	13	for 'Archips xylosteana' read 'Archips xylosteana'
732	7475	7	for '(PRSV) 0.6%' read '(PRSV) varied between 0.6%'
733	7477	6	for ' <i>P. spinosa</i> in' read ' <i>P. spinosa</i> were studied in'
733	7477	15	for 'cytochrome oxidase' read 'that of <i>P. domestica</i> '
742	7582	17	for 'resistance decreased' read 'resistance at times of high energy load. Abaxial stomatal resistances decreased'
762	7823	9	for 'guineense' read 'guineense'
765	7859	7	for 'J/m ² /s' read 'J/m ² /s) in'
798	8228	9	for '[Ceratocystis]' read '[Ceratocystis]'
811	8365	16	for 'the regular development' read 'and the dependence of'
821	8465	12	for 'differences flowering' read 'differences in flowering'
823	8487	7/8	for 'Cologne, German Federal' read 'cvs with the Hydrapick'
828	8542	5	for 'Institut M.I. Kalinina' read 'applied in late April'
854	8833	1	for 'Mushroom' read 'Straw mushroom'
862	8895	6	for 'exposing them to 32.2°C' read 'The effects of the time'

AUTHOR INDEX

National, research and public organizations, but not commercial firms, are indexed under relevant country

All separate name particles, e.g. Di & von, are transposed to follow the initials.

Variants of author's names may appear next to each other.

Anonymous articles are indexed by publication.

Acta Phytotherapeutica 6238
American Fruit Grower 1831
American Vegetable Grower 4915
CELOS Bulletin 1604
Champignoncultuur 263
Deciduous Fruit Grower 3565
Farming in South Africa 3507
Flavour Industry 2321
Frutticoltura 1372, 4301
Goodfruit Grower 6638
Groenten en Fruit 4375
International Sugar Journal 5657
Japan Pesticide Information 4141, 4932
Leaflet, U S Department of Agriculture 19
Orchardist of New Zealand 4189
Pépinéristes, Horticulteurs, Maraichers 6969
Quarterly News Letter, Tea Research Foundation of Central Africa 7266, 8277
Queensland Agricultural Journal 5492, 7120
Serviço Informativo da Junta Nacional das Frutas 5547
South African Sugar Journal 6451
Technical Advances in Shikoku Agriculture 7128
Tuinbouwberichten 6096
Tuinderij 1970
World Crops 1696
Aalders, L. E. 105, 2689, 3532, 3543, 6685, 6688
Aaron, J. R. 880
Abadzhyar, R. A. 1927
Abas, S. 8697
Abasa, R. O. 397, 1584, 3205, 6407
Abawi, G. S. 1149, 2831
Abbasov, A. M. 6816
Abbasy, A. M. 652
Abbott, A. J. 658
Abd El-Rahman, A. A. 9008
Abd-El-Rehim, M. A. 4456
Abd-El-Wahab, F. K. 2438
Abdalla, D. A. 436
Abdalla, M. M. 8210
Abdel-Fattah, A. F. 1245
Abdel-Gawad, M. M. 3023
Abdel-Kader, E. M. 3049, 9063, 9064
Abdel-Rahman, M. 4526
Abdel-Salam, A. M. 630, 631, 652, 5222, 5905, 7147
Abdel-Shaheed, G. A. 631, 5222
Abdel-Shaheed, G. H. 630
Abdel-Wahab, S. M. 3049
Abdou, I. A. 5168, 5172
Abdou, Y. A. 6819
Abdrakhmanov, O. K. 7109
Abdrakhmanov, S. G. 521
Abdulkadyrov, S. K. 4999
Abe, T. 6826
Abeles, A. L. 4483, 7720
Abeles, F. B. 222, 448, 1673, 4483, 7720
Aberconway, Lord 7035

Aberhart, D. J. 9014
Abeywardena, V. 1565, 9148
Abidi, S. M. H. 401
Abidov, A. 5921
Abiko, K. 6642, 7449
Abo-El-Dahab, M. K. 4667
Aboaba, F. O. 6492
Abolina, G. I. 2773
Abou-Awad, B. A. 29, 72
Abou Aziz, A. B. 3500, 5055
Abou-El-Gheat, Z. H. 5168
Abou-Zamzam, A. M. 2028
Abou-Zeid, A. 7427, 7432, 8431
Abou-Zeid, A. A. 5168, 5172
Abou-Zied, E. N. 7976, 9019
Abraham, D. J. 2343, 5532
Abraham, V. A. 1562, 1563, 8142
Abramishvili, V. P. 6640
Abramov, Yu. Sh. 6740
Abramova, L. Z. 8545
Abrasheva, P. 2722
Abreu, J. M. de 3185
Abu Blan, H. A. 5892
Abu, J. 3770
Abu, J. F. 602
Abu Salih, H. S. 5346
Abu Yaman, I. K. 5892
Abusin, A. M. 4875
Accati, E. G. 156, 4378
Accorsi, W. R. 7703
Acedo Villalba, F. J. 1522
Achari, R. G. 3073
Acharyya, N. 6396
Achten, J. 1330, 8854
Achtzehn, M. K. 7619
Acín Díaz, N. M. 1648
Ackerman, W. L. 315
Ackermann, C. E. 7074
Acland, J. D. 376
Acock, B. 3296
Acquier, G. 6698
Adachi, S. 6361
Adam, A. V. 3249
Adamić, F. 2519
Adams, D. G. 2204, 8909
Adams, P. 6910
Adams, P. B. 6944
Adams, R. E. 8514
Adams, W. 8671
Adamson, R. M. 1285, 2122, 5444
Adansi, M. A. 1601, 7142, 8166
Adaskalitsii, M. M. 4307
Adato, I. 5594
Adato, Y. 8106
Adawi, S. 3366
Adedipe, N. O. 1322, 2068, 2788, 4623, 7668
Adegbola, M. O. K. 4844
Adlerz, W. C. 3588, 5951, 6824
Adlung, K. G. 5685
Adrianov, S. N. 2869
Adrianova, G. P. 8358
Adriansen, E. 6135
Adrichem, M. C. J. van 4314
Adsuar, J. 669, 9193
Aduayi, E. A. 393, 2452, 4859, 6405
Aerts, J. 4330, 6698
Afanasenko, N. A. 948
Afaq, S. H. 7973
Agafonov, N. V. 969
Agafonova, Z. Ya. 5101
Agamalian, H. 603, 5305
Agaronyan, A. G. 5113
Agarwal, R. A. 1639
Agarwal, S. C. 7971
Agarwala, S. B. D. 9272
Aggar, M. E. 4770
Aggarwal, O. P. 1416
Agnihothrudu, V. 8148
Agnihotri, B. N. 5606
Agnihotri, J. P. 7616
Agrawal, G. D. 1426
Agrawal, S. C. 788

Agrios, G. N. 4272, 5770, 6565
Agüero, G. 8173
Aguirre, J. A. 5609
Agulhon, R. 6731
Aharoni, N. 1978, 6948
Ahée J. 1605
Ahée, J. 9185
Ahlrichs, L. E. 7254
Ahmad, A. 666
Ahmad, I. 609
Ahmad, S. 8036
Ahmed, E. M. 1504, 9103
Ahmed, M. 1346, 3096
Ahmed, N. 9229
Ahmed, N. J. 6429
Ahmed, S. S. 8042, 8043, 9058
Ahmed, Z. F. 1399, 3079
Ahmedullah, M. 596, 3599
Ahn, S. H. 522
Ahn, Y. P. 1445
Ahrens, J. F. 7042
Aillaud, G. 5319
Aina, O. J. 1291
Aitken, J. B. 1016, 1827, 5032, 6527, 6636
Aitken, W. M. 3255
Akamine, E. K. 2435, 4072, 4878, 6158, 6418
Akao, S. 7157, 8093, 9084, 9085
Akashi, Y. 7134
Akatnova, A. G. 7569
Akhmedov, A. M. 4345
Akhtar, S. W. 9224
Akhund-Zade, I. M. 8109
Akhundova, E. M. 5289
Akiba, F. 4528, 4533, 5328
Akram, M. 2837, 5514
Aksenova, V. A. 5935
Aksomaftis, P. K. 1141
Al-Ani, T. A. 5243
Al-Delaimy, K. S. 812
Al-Jaru, S. 8445
Al-Jasim, H. A. 812
Al-Rawi, A. 7521
Al-Vagab, K. 1302
Alabastro, V. Q. 4527
Alabouvette, C. 1192
Alabran, D. M. 7821
Alam, M. M. 2469, 8242
Alan, J. J. 636
Alan, M. N. 1329
Albagoury, M. E. 366
Alban, E. K. 546, 2866
Albano, D. J. 987
Albegov, R. B. 6892, 6893
Alberghina, O. 502
Albersheim, P. 3705
Albert, G. 2203
Albertini, A. 1806, 1851
Alborishvili, Ch. A. 4407
Albrecht, E. 3913
Albregts, E. E. 3785, 6695, 6699, 7528, 8747
Albrigo, L. G. 5571, 6354, 9099
Albuquerque, F. C. 6917
Alcaraz, C. 3114, 6479
Aldwinckle, H. S. 5766
Alekchina, E. M. 5700
Alekchina, L. A. 3580
Alekov, N. S. 2676
Alekperov, G. A. 5115
Aleksandrov, F. A. 3830
Aleksandrova, L. S. 2881
Aleksanyan, D. S. 5487
Alekseev, A. M. 8695
Alekseeva, S. A. 8345
Alekseeva, T. P. 8263
Alexander, A. F. 6348
Alexander, A. G. 1632, 1648, 6449, 8251, 8252
Alexander, G. 2028
Alexander, K. E. F. 5659, 7263
Alexander, L. J. 8765
Alexander, M. 3
Alexander, M. M. 8745

Alexandri, A. 1689
Alferova, N. D. 1905
Alfieri, S. A., Jr. 2269, 2287, 3002, 7039
Alford, D. V. 1075
Ali, E. 349
Ali, H. 1619
Ali, M. bin M. 3663
Ali, N. 801, 802, 1481, 1482
Ali, S. 7344
Ali-Zade, M. A. 5289
Aliev, D. A. 6898
Alimova, L. N. 8968
Aliniazee, M. T. 1922, 5862
Alipieva, M. 125
Alippi, H. E. 6181, 6346
Aljibury, F. K. 1106
Alkämper, J. 2092
Alkhazov, Yu. G. 3270
Ällami Gazdaságok Gyümölcsstermesztési Szakbizottsága 3355
Allamuradov, S. 1304
Allan, P. 1516, 4822, 5590, 7164
Allanazarova, U. 5068
Allaway, W. G. 5265, 7727, 8736
Allen, E. F. 5470
Allen, M. 866
Allen, M. W. 686
Allen, P. 4300
Allen, P. G. 14, 1142, 5427
Allen, T. C. 5428
Alleweldt, G. 1080, 2720, 2721, 6759, 8568
Allington, P. 14
Alison, E. 5782
Allison, W. F. 8201
Almeida, C. R. M. De 1519
Almeida, F. S. de 405
Almeida, L. d'A. de 8671
Aloni, B. 2406
Alpat'ev, A. V. 5367
Alpi, A. 711
Alscher, R. G. 2779
Alston, F. A. 2539
Alston, F. H. 461
Altinyay, N. 4292
Alumot, E. 3152
Alvarado, R. R. 6434
Alvarenga, S. C. De 2036
Alvarez-García, L. A. 1593
Alvim, P. de T. 3186, 3255, 4843
Alwa, K. R. 1281
Aly, M. D. H. 4489
Alyanskaya, N. S. 4318
Amano, S. 7325
Amano, T. 6817
Amante, E. 9170
Amoral, S. F. Do 1617, 2466
Amen, R. J. 3497
Amenomori, H. 1525
Amer, M. A. 8595
Americanos, P. G. 6337
Amici, A. 1021, 3475
Amico, V. 6994
Amin, A. H. 799, 2396, 2397, 3134
Amin, El S. 8280
Amin, H. D. 3210
Amin, M. H. 8210, 8250, 8259
Amin, S. M. 5222
Aminov, Kh. L. 8449
Amirdzhanov, A. G. 5823
Amirdzhanov, A. 2649
Ammat, A. T. 3648, 3733
Ampe, G. 4416, 4748
Amponsah, J. D. 8135, 9139
Amri, J. 5663
Amsen, M. G. 2489
Amson, F. W. van 9186
Amuti, S. K. 602
Anadoliev, G. 2533
Anagnostakis, S. L. 7380
Anahosur, K. H. 1360
Anais, A. 6798
Anais, G. 5945, 6888, 6906

- Anand, R. 2058
 Anand, V. K. 2930, 4632
 Anandaradzha, K. 7453
 Ancherbak, S. P. 638
 Ancheva, M. 6896
 Andersen, D. A. 2446
 Andersen, N. H. 7965
 Andersen, O. 4073
 Andersen, R. L. 4235
 Anderson, A. J. 3705
 Anderson, C. A. 3118, 3996
 Anderson, G. A. 5477
 Anderson, J. 469
 Anderson, J. L. 2867
 Anderson, J. N. 5287
 Anderson, L. E. 2819, 3742, 6008, 8725
 Anderson, W. B. 4921
 Anderson, W. C. 7656
 Anderson, W. P. 1673, 3765, 3766
 Andon, K. I. 1343
 Andrade, A. M. de S. 5262
 Andrade, L. J. 4056
 André, L. 5370
 André, M. 6107
 Andreev, A. 4536, 4555, 6546, 6811, 8773
 Andreeva, N. F. 5101
 Andreeva, R. A. 7808¹
 Andresen, F. 4519
 Andreucci, E. 717, 8113
 Andrews, C. H. 6113
 Andronova, L. M. 5538
 Andryushchenko, D. P. 5715, 5741
 Andryushchenko, V. K. 8288
 Aneshansley, D. 5415
 Anet, E. F. L. J. 988, 989
 Angelov, T. 6664
 Angelova, R. 8784
 Angenot, L. 9060, 9061
 Angkapradipta, P. 2463, 6422
 Angmor, J. E. 3015
 Anić, J. 2519
 Anisimov, M. M. 3961
 Anisimova, G. G. 2530
 Anjaneyalu, Y. V. 3034
 Anjaneyulu, A. 7766, 7767
 Anpalov, V. A. 2698, 2699, 2700
 Anstett, A. 7022
 Antcliff, A. J. 552, 5140, 8527
 Antipović, D. 6273, 6274
 Antognozzi, E. 2645, 7455, 8461
 Antonenko, G. A. 2664, 5700
 Antoni, H. 9264
 Antonin, P. 2581, 2583
 Antonio, J. P. San 4603, 5378
 Antonov, Yu. P. 7640, 8623
 Antonyan, A. S. 1123
 Antonyan, L. K. 1883
 Antoszewski, R. 5819, 7395, 8518
 Antunes, E. J. 359
 Anuforo, D. C. 4759
 Anzalone, L., Jr. 8229
 Aoba, T. 8891
 Aoki, M. 2782, 2870
 Aoki, N. 7419
 Aoki, S. 6592
 Apablaza, G. E. 642
 Apacible, A. R. 1555
 Apelbaum, A. 2065, 2066, 3154, 4511
 Appachu, K. M. 8145
 Appalanarasiah, P. 1636
 Applegren, M. 7890
 Applebaum, S. W. 182, 1490
 Appleby, J. E. 6211
 Appleton, J. 1260
 Applewhite, P. B. 4145, 6235
 Apruda, P. I. 1089
 Apsamatova, R. A. 2334
 Aradski, M. 2593, 7365
 Aragaki, M. 7876
 Arai, K. 6826
 Araki, C. 6592
 Arangelov, A. P. 3481
 Arasimovich, G. A. 1929, 8566
 Aratani, T. 5498
 Aravindakshan, M. 7172
 Archibald, W. A. 9
 Arcia, A. 3775
 Arditti, J. 4683, 5458, 6207, 6209, 7029
 Arendt, N. K. 7438
 Arene, E. O. 786
 Arens, T. 9171
 Arenstein, Z. 3583
 Arevalo, A. R. 8207
 Arevalo, R. A. 9237, 9238
 Arias de Estrada, T. 8076
 Arinshtein, A. I. 1411, 7983
 Arisumi, T. 299
 Armbruster, J. 8879
 Armero, T. 2639, 6631
 Armstrong, W. 1233
 Arnal, C. 5491
 Arnaud, F. 6412
 Arneson, P. A. 5766
 Arnold, C. E. 3484, 6652
 Arnoux, M. 8454
 Arora, J. S. 8161, 9173
 Arora, N. D. 204
 Arora, R. B. 1416
 Arora, R. S. 5434
 Arora, S. K. 233
 Arrivé, M. 8991
 Arroyo, L. E. 8141
 Arruda, H. V. 1617, 2466
 Arthurton, P. A. J. 2854
 Artykhova, R. 2773
 Arulrajah, T. 8749
 Arumugam, R. 8569
 Arutyunyan, R. G. 2589
 Arvier, A. C. 1649, 1651
 Arzee, T. 2201
 Arzolla, J. D. P. 2037, 2038
 Asaf, R. 5058
 Asahi, T. 218
 Asai, N. 5460
 Asanuma, K. 6000
 Asare-Nyako, A. 8135, 9139
 Asatani, M. 2190
 Asatiani, G. Sh. 5119
 Ascenso, J. C. 7184, 7186
 Ascher, P. D. 5428, 8858
 Asen, S. 723, 1344, 8877
 Ashby, D. G. 455
 Ashby, J. P. R. 3818
 Ashihara, H. 1305, 4592
 Ashour, W. A. 4489
 Ashraf, H. 9235
 Asi, A. A. 801, 802
 Asif, M. I. 2091
 Asjes, C. J. 2248, 2249, 2956, 2957, 6179, 6180, 8905
 Askar, A. 5607, 5633, 8129
 Askari, A. 5880
 Aslanov, S. M. 3970, 8040
 Aso, P. J. 370
 Asomaning, E. J. A. 5608
 Aspidova, Zh. V. 5173
 Aspiras, A. B. 7171
 Assaf, R. 1734
 Assche, C. Van 6920, 8779, 8791
 Assem, M. A. 630, 631, 652, 5222, 5905
 Association Scientifique Internationale du Café 9172
 Atal, C. K. 7973
 Atallah, M. 1081
 Atanasov, A. T. 2569
 Atanasov, Ya. 5117
 Atanasov, Zh. 3952
 Atanda, O. A. 3181, 4839
 Ataulaev, N. A. 2773, 5962
 Atchison, B. A. 5980
 Atherton, J. G. 278
 Atimoshoae, M. V. 3596
 Atkin, C. L. 174
 Atkin, D. R. 5569
 Atkin, J. D. 5232, 5233
 Atkins, C. A. 5895, 5896
 Atkins, P. 702
 Atsmon, D. 2005
 Attaway, J. A. 4815, 4816
 Attri, B. S. 7476
 Attridge, T. H. 7733
 Aubert, B. 1463, 2379, 3569, 4832
 Audemard, H. 958
 Augé, G. 716
 Augustin, E. 2023, 3695
 Augustin, P. 4457
 Aulakh, B. S. 8552
 Aulakh, K. S. 4573, 6106
 Aulenbach, B. B. 3434
 Aung, L. H. 248
 Aung Than 2898
 Aurich, O. 2045
 Auriol, J.-M. 1310, 1311, 6953
 Ausland, O. 2916
 Austen, V. C. 374
 Austin, M. D. 1744, 6586
 Austin, R. B. 124, 1150, 2009, 3767
 Austin, S. W. 5550
 Australia, Bureau of Agricultural Economics 1721
 Australia, Bureau of Sugar Experiment Stations 9219
 Australia, CSIRO Division of Irrigation Research 550, 1133, 1466, 6480, 6523, 6769, 9074
 Australia, Museum of Applied Arts and Sciences 4737
 Australia, New South Wales Department of Agriculture 4296, 4782, 5385, 5600, 5693, 5882
 Australia, Queensland Department of Primary Industries 7596, 8313, 9068, 9121
 Australia, Sandy Trout Food Preservation Research Laboratory 755, 901, 1134, 1460, 1529
 Australia, Tatura Horticultural Research Station 450
 Australia, Victoria Department of Agriculture 6518
 Australia, Waite Agricultural Research Institute 3344, 3602, 3831, 4094, 6712
 Austria, Höhere Bundeslehr- und Versuchsanstalt für Gartenbau 114, 265, 347
 Avall, H. 115, 2738
 Avants, J. K. 2883
 Avellaneda, M. O. 7565
 Averett, J. 2942
 Avera, V. 2943
 Angelis, A. 4390, 4595
 Avidzba, N. Sh. 7148
 Avieli, A. 3678
 Avieli, E. 3786
 Avnimelech, Y. 6479
 Avtomonova, L. E. 3112, 3113
 Awad, M. 1525
 Awasthi, R. P. 807, 1509
 Awatramani, N. A. 9164, 9165
 Ayensu, E. S. 4680
 Ayers, G. W. 4426, 5920
 Aynehchi, Y. 1450
 Ayonoadu, U. W. U. 2011, 2014, 5973, 5975
 Ayyasamy, M. K. 5223
 Azad, K. C. 930
 Azarova, V. N. 6534
 Azeri, T. 8077
 Aziz, A. B. A. 2438, 2439, 2440, 3500, 5055
 Azizi, H. 8246
 Azzi, G. M. 4884
 Azzony, M. El 1479
 B. B. C. 854
 B. D. N. B. 854
 Baarends, J. L. 8339
 Babbitt, J. K. 8799
 Babi, V. S. 2585
 Babilodze, N. S. 3276
 Babrikov, D. 5826, 5831, 5843, 5844
 Babu, C. N. 416, 1618, 7250
 Babu, H. 9101
 Babu, M. R. 7078
 Babu, P. C. S. 838
 Babu, P. C. S. 447, 670, 2481
 Babuk, V. I. 945
 Babushkin, L. N. 7804
 Bachelier, J.-C. 5853
 Bachinger, K. 6607
 Bachthaler, E. 7033
 Bachy, A. 8164
 Back, A. 1978
 Back, N. 4909
 Badr, S. A. 9113
 Baecke, N. De 3641
 Baek, H. K. 674
 Baer, H. 7689
 Baer, J. 7898
 Bagdasaryan, A. Z. 5952
 Baggett, J. R. 1992
 Baggolini, M. 2529, 2581, 3587
 Bagnard, C. 5491
 Bagni, N. 5175
 Bagshaw, R. 5308, 5309
 Baicu, T. 8482
 Baier, S. 6290, 9027
 Bajjal, M. 9134
 Bailey, C. 3374
 Bailey, H. E. 773, 9048
 Bailey, V. L. 773, 9048
 Bailey, W. A. 276
 Bailiss, K. W. 871
 Baines, R. C. 4787
 Baisted, D. J. 5280
 Bajaj, K. L. 5325
 Bajaj, S. 6018
 Bajaj, Y. P. S. 7074
 Bajpai, M. R. 6250
 Bajpai, P. D. 1625
 Bajpai, P. N. 5630, 9284
 Bajwa, B. S. 9047, 9079
 Bajwa, M. S. 493, 1592, 2713, 3144, 5665, 7075, 7422, 7425, 7982, 9281
 Bakanidze, M. Sh. 3131
 Baker, C. J. 3201, 4057, 4860, 4861, 8151
 Baker, E. C. 1204, 4391
 Baker, J. E. 4904, 5664
 Baker, J. H. 469
 Baker, J. J. 6497
 Baker, K. F. 3316
 Baker, L. R. 1197, 1198, 2006, 6018
 Baker, N. R. 4917
 Baker, P. B. 2505, 3331, 7324
 Baker, R. 714
 Baker, S. A. 7100
 Bakhchevanova, S. 4421, 4550
 Bakhshi, J. C. 556, 589, 590, 2713, 3291, 8104, 8105, 9280
 Bakhtadze, K. E. 1467
 Bakina, L. A. 763
 Bal, A. K. 2833
 Balachandran, A. 8157
 Balanovskii, V. A. 3573
 Balashov, T. N. 2050
 Balasubrahmanyam, V. R. 8571
 Balatková, V. 8873
 Balázs, E. 6514
 Balázs, K. 2671
 Balbaa, S. I. 3049, 4756, 7099, 8006
 Balcar, Z. 5513
 Bald, J. G. 16
 Baldacci, E. 5853
 Baldanzi, G. 8671
 Baldassari, T. 6513
 Baldi, G. 8704
 Baldini, E. 977, 2531, 4267, 5028, 5029, 5030, 5143, 5704
 Baldry, C. W. 8248
 Baldy, P. 7839
 Balea, A. 8478
 Balerdi, C. F. 3570, 5841
 Balevski, A. 7372
 Balina, N. V. 7722
 Balint, J. 4173
 Ball, E. A. 4683, 6207, 7029
 Ballantyne, B. 1225
 Ballard, A. L. 4994
 Ballard, J. 7334
 Ballard, J. K. 1709
 Ballatori, E. 7436

Author Index

- Ballinger, W. E. 1019, 1065, 4319, 6690, 7517
 Ballio, A. 4928
 Balloni, W. 2701
 Balobin, V. N. 5723
 Baloch, G. M. 9158
 Baltovski, B. 1882
 Balut, F. F. 9170
 Balwinder Singh Aulakh 8552
 Balzaryavichyus, P. Yu. 1141
 Bamber, C. M. 8342
 Bammi, R. K. 6295, 6297
 Banage, W. B. 387
 Bandeen, J. D. 3660
 Bandoni, A. C. 3964
 Bandoni, A. L. 2348, 9043
 Bandopadhyay, M. 346
 Bandyukova, V. A. 3340, 5525
 Banegas, R. 3699
 Banerjee, A. B. 9033
 Banerjee, B. 8010
 Banerji, A. 1436
 Banerji, J. 6310
 Bangash, N. A. 7761
 Bangerth, F. 2602, 2603, 3432
 Banguera, R. L. 3189
 Banham, F. L. 1001
 Bánki, G. 1545
 Banko, T. J. 5456
 Banks, R. A. 3906
 Bannier, L. J. 2927
 Bannon, J. J. 4535
 Banse, H.-J. 5847
 Banthorpe, D. V. 760, 4747, 6319
 Banu, K. 5495
 Baqi, A. 507
 Bar-Akiva, A. 864, 2384, 6479
 Bar-Joseph, M. 5560
 Bar-Yossef, M. 3999
 Baraer, J. 8683
 Barak, D. 3366
 Barakat, M. Z. 605
 Baraldi, G. 457
 Baran, E. I. 97
 Baranov, E. I. 1103
 Baranova, A. A. 5318
 Baranowski, A. 4882
 Baratta, B. 817
 Barbakadze, T. P. 7163
 Barbee, D. G. 8294
 Barben, B. 909
 Barben, E. 1712, 2562
 Barber, G. A. 647
 Barber, S. A. 4561
 Barbin, D. 3157
 Barbora, B. C. 4896, 5661
 Barden, J. A. 3413
 Barden, L. E. 2924, 4621
 Bareketh, M. 3801, 3993
 Barendse, G. W. M. 1339
 Bargonio, G. 499
 Barkai-Golan, R. 6948
 Barker, A. V. 606, 632, 1063, 1950, 1957, 4424, 8949
 Barker, A. W. 181, 5241
 Barker, K. R. 2877
 Barker, W. G. 121
 Barkley, G. M. 8686
 Barkouki, M. El 789, 2167, 2168, 2414
 Barksdale, T. H. 2107
 Barkus, B. 1478
 Barlahan, A. V. 2074
 Barma, B. 7661
 Barmby, B. A. 8851
 Barmore, C. R. 4817
 Barna, B. 2792
 Barna, J. 7591
 Barnabás, B. 5535
 Barnard, C. J. 6326
 Barnes, G. L. 5057, 6805
 Barnes, M. F. 1236
 Baroova, S. R. 6064
 Barr, W. 3925
 Barralis, G. 5840
 Barreiro, M. 3728, 8603
 Barrera, G., J. L. 5794
 Barrett, G. 2127
 Barrett, J. N. 7083
 Barrett, R. E. 1322
 Barrientos, F. 8501
 Barrios G., A. 7699, 7700, 8679
 Barrios, J. R. 8022
 Barritt, B. H. 539, 8504
 Barroso, M. A. T. 1510
 Barry, J. R. 626
 Barshi, G. 9114
 Barskaya, E. I. 7722
 Bartaria, A. M. 6445
 Bartels, E. A. 1917
 Bartha, J. 7371, 7384
 Bartlett, D. 1955
 Bärtoi, H. 7426
 Bartoshuk, L. M. 4400
 Bartz, J. A. 2873, 6936
 Barua, A. K. S. 3030
 Barua, D. N. 9277
 Baruah, A. K. S. 7974
 Baruel, J. 8788
 Barz, W. 6009
 Basa, S. C. 6310
 Basargin, L. D. 1431
 Basari, T. 4079
 Basco, H. J. 5655
 Basiaux, P. 6698
 Basiouny, F. M. 3997
 Basler, E. 7712
 Basler, P. 4353, 5836
 Basnitzky, Y. 3633
 Basoccu, L. 543, 4538, 5820
 Basova, A. I. 3544
 Bassi, M. 1169
 Bassino, J. P. 6069
 Bassiouni, M. 605
 Bassir, O. 2351
 Basso, M. 4269
 Basson, W. D. 3302
 Bastdorff, R. S. 635
 Bastiaansen, H. 4419
 Bastin, M. 130, 3630
 Basu, R. N. 190, 3219, 3226, 3233, 3236, 3239, 8678
 Basu, S. K. 4831, 9125
 Basu, S. L. 3974
 Basuki, R. 4079, 8180, 9210
 Batal, K. M. 2128
 Bateman, D. F. 4619, 8688
 Bateup, C. B. 4990
 Batey, T. 3299
 Bathala, M. S. 2349
 Báthory, M. 4775
 Batinica, J. 6660
 Batiste, W. C. 1761
 Batra, R. C. 5562, 5583
 Batson, F. 7887
 Batson, W. E., Jr. 8780
 Batta, A. K. 4753
 Batyr, R. A. 908, 5741
 Batyrkhanov, Sh. G. 4999
 Baudewijn, J. 4241
 Bauduin, H. 3059
 Bauer, D. H. 7724
 Bauer, R. 8487
 Bauerle, W. L. 3809, 4557, 4566, 4576, 4577, 5205, 5363, 5364, 6063
 Bauerová, O. 9013
 Bault, A. 7740
 Baumann, E. 5161
 Baumann, G. 471, 4948
 Baumann, T. W. 4863, 4867
 Baumgardner, R. A. 1830, 2787, 5777
 Baur, A. H. 967, 2590, 6591
 Baur, J. R. 6855
 Bavel, C. H. M. Van 4
 Baxter, L. W., Jr. 2981, 2995
 Bayoumi, M. 8210
 Bayoumi, N. M. 8250
 Bazgan, C. 7482
 Bazzocchi, R. 540, 5029
 Beal, J. L. 2349, 2370, 2372, 6320
 Bean, W. J. 8283
 Beard, J. B. 301
 Beattie, B. B. 3428, 5750, 8410
 Beaudin-Dufour, D. 1588
 Beavers, D. V. 2618, 3449
 Bech, J. 4596
 Beck, G. R. 2284
 Becka, J. 1786, 5003
 Becker, H. 1930, 7553
 Becker, R. F. 1149
 Becker, V. 1679
 Becker, W. M. 4480
 Beckham, L. S. 5238
 Beckman, C. H. 2120, 4571, 4572
 Beczner, L. 3703
 Bedding, A. J. 877
 Bedford, E. C. G. 9096
 Bediashvili, S. L. 66
 Beel, E. 4679
 Beeman, C. H. 4994
 Beernaert, H. 9107
 Beetz, K. J. 2723
 Beevers, H. 4, 4395, 7690
 Beevers, L. 3753
 Beg, M. N. 8238
 Begazo, J. C. E. O. 3192
 Begbie, R. 203
 Begtrup, J. 6208
 Béguin, J. M. 4923
 Behar, D. S. 6861
 Behari, J. R. 3071
 Behera, S. N. 8739
 Behnke, H.-D. 1700
 Behrens, R. 3304, 5283
 Beijersbergen, J. C. M. 736, 7015
 Beijersbergen, J. C. M. 296
 Beinik, A. I. 8566
 Beirne, B. P. 2501, 5861
 Beisler, J. 4774
 Beitler, G. A. 3686
 Beitz, H. 326, 2320, 7988
 Bekhtereva, M. N. 7738
 Bekov, E. M. 8544
 Belcher, R. M. 6450
 Belej, J. 2049
 Belgium, Centre de Recherches Agronomiques de l'État 2517, 4363, 6691
 Belgium, Comité National pour l'Étude de la Culture Fruitière 902
 Belgium, Government Agricultural Research Centre 4925, 5906, 6272, 8835
 Belgium, Institut pour l'Encouragement de la Recherche Scientifique dans l'Industrie et l'Agriculture 1131, 4942, 5071, 5386
 Belgium, Proefbedrijf der Noorderkempen 1060, 5148, 8578
 Belgium, Station Provinciale de Recherches Scientifiques Agricoles et Viticoles 3559
 Belgium, Tuinbouwstichting Hageland-Zuiderkempen, Rillar 4297, 6503
 Belgium, Westvlaamse Proefuin, Beitem-Rumbeke 1028
 Belgraver, W. 5395, 6968
 Belić, M. V. 2620
 Belicovschi, A. 7566
 Belik, V. F. 5881
 Belikov, P. S. 5984
 Belin, J.-M. 5876
 Belkov, V. L. 5864
 Belli, G. 1117, 5853
 Bellia, F. 3364
 Bellini, E. 2419, 3167, 3460, 3461, 3462, 3463, 3464, 6625
 Bellis, E. 864, 1615
 Beloborodova, G. G. 8350
 Belobrov, A. V. 935
 Belokhonov, V. I. 2547
 Belousov, M. K. 2547
 Belousov, V. S. 1834
 Belousova, L. A. 6074
 Belova, I. A. 621
 Belsten, J. C. 2326
 Belyaeva, T. G. 4299
 Ben-Dov, Y. 4004
 Ben-Jacov, J. 2184
 Ben-Shalom, I. 3999
 Ben-Yehoshua, S. 1811, 1978, 2406, 2636, 4012
 Benbasat, E. 3037
 Bencivelli, A. 5734
 Benda, G. T. A. 6441, 8225
 Benedek, M. 246
 Benedict, R. H. 595
 Benedict, W. G. 4575, 8816
 Beneš, K. 7692
 Beniček, J. 5508
 Benizé, N. 6395
 Benk, E. 102
 Bennati, E. 9045
 Benne, R. 1891
 Bennet, R. F. 4584
 Bennett, A. H. 2646
 Bennett, F. D. 1640, 2469, 4430, 5654, 8238
 Bennett, J. E. 6228
 Bennett, M. 547
 Bennett, R. D. 6367
 Benoît, F. 3555, 4333, 5097, 5910, 6698, 7531, 7647, 8519, 8520, 8521, 8522, 8523, 8646, 8802
 Bensink, J. 1973
 Benson, B. L. 2077
 Benson, N. R. 961, 8373
 Benson, R. J. 9130
 Bentley, H. 648
 Bentley, K. 186
 Benveniste, P. 1960, 2034
 Benzing, D. H. 305
 Beraha, L. 8515
 Beramis, M. 4568
 Beránek, F. 341, 6273, 6274, 7993
 Berard, D. F. 5981
 Berbec, S. 3978
 Berbert, P. R. F. 3186
 Berbert, P. R. F. 4849
 Bercks, R. 3581, 7570
 Berenguer, T. 508
 Berényi, M. 6897, 7778
 Berestetskii, O. A. 6551
 Berestova, G. N. 4299
 Berezovskii, K. K. 6864
 Berg, L. Van den 1148, 7753
 Berg, W. 2308
 Bergamin, F., H. 3199
 Bergamini, A. 71
 Berge, H. 878
 Bergen, J. van 4968
 Bergen, W. G. 6018
 Bergendahl, P.-O. 7337
 Berger, A. 57
 Berger, R. D. 2144
 Berger, W.-G. 5879
 Bergeret, J. 4360
 Bergeson, G. B. 244
 Bergman, B. H. H. 2958
 Bergmann, W. 6276
 Berkowitz, J. E. 1665
 Bermúdez, M. E. 4056
 Bernal, G. 9190
 Bernardi, J. B. 4532
 Bernáth, J. 6315
 Bernatskaya, M. L. 7728, 8721
 Berner, C. 1553
 Bernier, C. C. 642
 Bernier, G. 3010, 5491
 Bernstein, L. 2161
 Bernstein, Z. 3594
 Berry, C. D. 5449
 Berry, J. W., Jr. 4551, 4560, 5204
 Berry, M. I. 9041
 Berry, S. Z. 2862
 Berthele, B. 1917
 Bertrand, D. E. 592, 2729
 Besemer, S. T. 5682
 Beskaravainaya, M. A. 753, 3928
 Beslaneev, V. D. 7775
 Besombes, J. P. 4877, 5639
 Besse, J. 9141
 Besson-Guyard, M. 1656
 Best, D. J. 6595
 Betancourt, L. 5206, 5302
 Betheder-Matibet, M. 406
 Bethell, R. S. 1761
 Betlach, J. 2840
 Betteridge, B. 7716
 Bettner, L. 6502
 Betto, E. 1169
 Beuzenberg, M. P. 1392, 7903

- Beuzenberg, W. P. 5433
 Bevan, R. C. 5144
 Bewley, J. D. 3644
 Beyer, E. M., Jr. 223, 2824, 5968
 Beynon, K. I. 615, 7302
 Beyerly, A. 4545, 5329
 Bezbaruah, H. P. 6456
 Bezukladnikova, N. F. 8018
 Bhadauria, A. S. 330
 Bhagat, S. D. 3030, 7974
 Bhagchandani, P. M. 3782, 6874
 Bhakuni, D. S. 1451, 2362, 4760
 Bhalla, O. P. 7476
 Bhambota, J. R. 3292, 5629, 7425, 8075
 Bhan, S. 8979
 Bhandari, M. C. 8657
 Bhandari, M. M. 8011
 Bhandari, Y. M. 234
 Bhandary, K. R. 814
 Bhargava, K. K. 9005
 Bhaskaran, T. L. 6443, 9227
 Bhaskarannair, V. K. 8186
 Bhat, K. S. 9156
 Bhat, N. T. 3176
 Bhat, P. K. 1582
 Bhatia, G. N. 4893
 Bhatia, I. S. 5325, 7754, 7972
 Bhatt, B. 9059
 Bhatt, D. C. 5494
 Bhatt, J. G. 3085
 Bhatt, M. G. 2332
 Bhattacharyya, G. C. 8128
 Bhattacharyya, K. C. 3208
 Bhatti, D. S. 4095
 Bhide, V. P. 7572
 Bhoj, R. L. 8202
 Bhojwani, S. S. 2202
 Bhuibal, B. G. 1124, 8160, 8570
 Bhullar, B. S. 3656, 5325
 Biamonte, R. L. 2289
 Bianco, V. V. 5182, 5925, 7649, 8605
 Bibb, P. C. 284
 Bible, B. 3674
 Bickford, E. D. 8307
 Bid, N. N. 665, 2492, 3217, 3220
 Bidabé, B. 41, 42
 Biddulph, O. 4
 Bidwell, R. G. S. 1219
 Biehn, W. L. 6919
 Bielenin, A. 7382
 Bielenin, S. M. 7491
 Bielorai, H. 3799
 Bierhuizen, J. F. 8611
 Biernaux, J. 6942
 Bierner, M. W. 2942
 Bieske, G. C. 418, 1627
 Bigger, M. 1551
 Biggs, D. R. 7719
 Biggs, R. H. 3146, 3997, 4817
 Bigotti, P. G. 607
 Bik, R. A. 745, 748, 2294
 Bilderback, D. E. 3856
 Bilets'ka, D. K. 940
 Bilgrami, K. S. 4869
 Bilgrami, R. S. 8110
 Bilić, N. 2520
 Bilichenko, G. P. 4963
 Billet, D. 9007
 Billing, E. 6519
 Billingsley, H. D. 3425, 8384
 Binding, H. 6153
 Bindra, O. S. 5582, 8760
 Bing, A. 2185
 Bingham, S. W. 5443
 Bini, G. 2419, 5789
 Binns, E. S. 4602, 7838
 Binyamini, N. 2377
 Biondi, G. 897
 Biran, I. 4653, 7949, 8888, 8889, 8890
 Bird Piñero, J. 1611
 Birgis, D. S. 6903
 Birmingham, B. C. 2820
 Birta, I. 7809
 Biscoe, P. V. 2039
 Bishay, D. W. 8961
 Bishop, J. C. 5214
 Bishop, R. F. 2081
 Bisiach, M. 474, 1215
 Bismuth, E. 8593
 Bisset, N. G. 6316, 6317, 9060
 Biswal, U. C. 8969
 Biswas, A. K. 855
 Biswas, R. C. 1437, 1440, 1441
 Bitó, M. 3628
 Bitters, W. P. 794, 4787
 Bittner, M. 8960
 Bivins, J. L. 2921, 6226, 6227
 Bjerkestad, E. 2916
 Björklund, B. 2971
 Björkman, R. 2317
 Bjurman, B. 2489, 8503
 Black, M. 5687
 Black, S. M. 8592
 Blackman, G. E. 225, 2032, 7716
 Bladon, P. 1355
 Blagonravova, L. N. 741, 3418
 Blaha, J. 5016, 7557
 Blake, C. D. 1231, 2484
 Blake, J. 7026
 Blake, R. C. 3536
 Blakely, J. A. 2318
 Blakely, L. M. 2073
 Blakely, N. 1362, 5429
 Blakeman, J. P. 7615
 Blanchard, M. 7116
 Blanchard, P. 1906, 8535
 Blanco, H. G. 394, 3200, 7192
 Blank, H.-G. 4224
 Blaricom, L. O. Van 1830, 5777
 Blasco L., M. 7181
 Blasse, W. 1711, 8285, 8441
 Blassinski, J. 2076
 Blazquez, C. H. 6043
 Bleier, W. 5486
 Blend, V. P. 5748
 Blev, M. I. 8345
 Blinov, V. A. 5699
 Blinova, E. E. 5699
 Bliss, F. A. 4484
 Blixt, S. 3884
 Block, J. H. 2988
 Blommaert, K. L. J. 2324, 6234
 Blommers, J. 7522
 Blondel, L. 804, 3155, 9077
 Bloom, J. R. 1822
 Blumenfeld, A. 2378, 2885, 3093
 Blumenfeld, T. 3935
 Bø, A. 4429
 Boa, W. 8635
 Boamah-Mensah, E. 7215
 Boardman, N. K. 185, 2026, 2072
 Boateng, B. D. 8134
 Bobbio, F. O. 7273
 Bobbio, P. A. 7273
 Bobeve, M. 6684
 Boboshevska, D. 6793, 6794
 Bobryakova, T. G. 4306
 Boch, R. 3529
 Bocharnikova, N. M. 4299
 Bockstaele, L. 167, 1160, 4416, 4748, 8672
 Bockstedt, W. 1005
 Bodi, I. 7482
 Boe, A. A. 689, 5456
 Boeker, P. 8916
 Boelema, B. H. 4503
 Boer, J. H. De 2242, 4656
 Boer, R. de 7941
 Boer, W. Den 1971, 2247
 Boerema, G. H. 3317
 Boertje, G. A. 7628
 Boetzelaer, G. J. van 8411
 Bogacheva, N. G. 8018
 Bogatov, N. P. 5045, 5788
 Bogdan, G. P. 7730
 Bogdan, M. 7373, 8413
 Bogdanov, Yu. F. 2948
 Boggiatto, A. J. 8502
 Bognár, S. 6571, 6875
 Bogomolova, N. N. 920
 Bohländer, H. 6221
 Böhme, L. 2160
 Böhmer, R. G. 3302
 Bohn, G. W. 4443, 5221
 Bohn, R. 2497
 Boichev, A. 1102, 3575
 Boiko, G. N. 2546, 2591
 Boikov, A. 2176, 5397
 Boikov, D. 7472
 Boitsova, A. V. 959, 4225, 5004
 Bojić, M. 6550
 Bokelmann, G. S. 9012
 Bokhari, M. H. 6988, 6989
 Bokhorst, D. 5683
 Bokuchava, M. A. 5875
 Bokura, T. 7355
 Bolay, A. 1115, 2614, 3437, 6643, 6644
 Boldyrev, M. I. 2582, 2688
 Boling, J. C. 5196
 Bolkvadze, V. I. 6466
 Boll, W. G. 2805
 Bollinger, J. 5342
 Bolt, L. C. 8111
 Bolton, A. T. 158
 Bolwyn, B. 7707
 Bömeke, H. 3520
 Bompeix, G. 4227
 Bonaszewski, K. 8532
 Bond, I. P. 4253
 Bond, J. 7035
 Bondad, N. D. 8804
 Bondarev, I. E. 2563
 Bondarev, V. P. 581, 6723
 Bondoux, P. 41, 42, 4227
 Bonduryanskaya, B. I. 1732
 Bondzhukov, D. 1096, 2718, 8537
 Bonetti, S. 5126, 6730
 Bongiorno, A. 6548
 Bonini, V. 3819
 Boninsegna, J. A. 3804
 Bonneau, G. 4278
 Bonnemain, J.-L. 7726, 8639
 Bonnemaison, L. 2578, 2579
 Bonney, D. 906
 Bonnyai, J. 1341, 2214, 7896
 Bono, A. De 816, 5591, 7165, 7166
 Bontovits, L. 6107
 Bonuccelli, A. 287, 297
 Boodley, J. W. 8861
 Boodt, M. De 5419
 Boodt, M. de 7291
 Bocher, L. J. 8299
 Boon, J. van der 2947
 Boonnitee, A. 77
 Boonsirat, C. 9208
 Boonstra, J. J. 2169
 Boontjes, J. 5427, 7902
 Boos, G. V. 621, 1941, 4464, 5158
 Booster, D. E. 8500
 Booth, R. H. 664, 4147
 Boothroyd, C. W. 1105
 Bootsma, J. H. 8361
 Bopaiah, M. G. 5555
 Bopearatchy, R. N. 5662, 6460
 Bopp, M. 3942, 7074
 Borax Consolidated Ltd. 6780
 Bordia, N. S. 8616
 Bordia, P. C. 231
 Borecka, H. 6707
 Borecki, Z. 6707, 7382
 Borges F., O. L. 9127
 Borges, J. M. 1554, 4050
 Borghi, B. 2781
 Borisov, A. S. 6739
 Borisova, T. A. 6857
 Borkar, D. H. 1475
 Borna, Z. 611, 613, 1165
 Borner, H.-G. 1930
 Börner, T. 5407
 Bornman, C. H. 1468, 1471
 Borodulina, F. Z. 6572
 Borsani, O. 1826
 Borthwick, H. 5687
 Borys, M. W. 6829
 Bos, L. 1693, 7947
 Bosco, G. F. Del 818, 7442
 Bose, E. 5022
 Bose, P. K. 9235
 Bose, S. 5334, 8010
 Bose, T. K. 314, 5677, 8840
 Boshnakov, P. 4379
 Bosi, A. 61, 5028
 Boskou, D. G. 253
 Boskovic, P. 2966, 7915
 Bosley, P. R., Sr. 6223
 Bosley, R. 6223
 Bosse, G. 720, 2215, 2225, 2946, 6964
 Bostian, B. 7390
 Boswell, S. B. 3992, 4783, 5554, 6341
 Bottalico, A. 5353
 Böttcher, H. 2090
 Böttger, M. 1155
 Boubals, D. 5853
 Bouco, L. 6758
 Boudet, A. 4163
 Boudreau, G. W. 3589
 Bouhot, D. 9109
 Bouillon, G. 8848
 Bould, C. 881, 1860, 7368, 8375
 Boulter, D. 255, 2046, 4493, 7725
 Boulware, M. A. 252
 Bouman, F. 7941
 Bouquet, A. 1428
 Bourbouloux, A. 7726
 Bourdeaut, J. 1524, 5551
 Bourgeois, M. 8601
 Bourgin, J.-P. 4146
 Bouron, H. 4138, 5680
 Bourque, P. 4684
 Bourzeix, M. 3601
 Bousquet, J. F. 8601
 Boutin, D. 8165
 Bovey, R. 5128, 5853
 Bowe, R. 2160
 Bowen, G. D. 6479
 Bowen, J. E. 1643, 4101, 4102, 8217, 8218
 Bowers, S. A. 5237
 Bowman, G. E. 678, 3296
 Bowman, J. J. 6855
 Bowmer, K. H. 6543
 Bowyer, J. W. 278
 Box, C. O. 4657
 Boxma, R. 2994
 Boxus, P. 6698
 Boyarkina, I. S. 306
 Boyce, D. S. 4433
 Boyce, J. P. 427, 9263
 Bozhinova-Boneva, I. 1120, 6716, 7548
 Bozhinova, I. 5109, 7552
 Bozhkov, I. 3796
 Brack, C. E. 1038
 Bradbeer, J. W. 5986, 6850, 8448
 Braddock, R. J. 806
 Bradley, G. A. 1204, 3339, 4391
 Bradley, M. R. 1261
 Bradley, M. V. 4261
 Bradt, O. A. 7558
 Bradu, N. V. 4293
 Brady, L. R. 8014, 8015
 Brady, N. C. 3
 Braga, J. M. 172, 4471
 Bragt, J. van 8907
 Braikov, D. 5831, 5843, 5844
 Brain, K. 7415
 Brain, K. R. 3088
 Bramlage, W. J. 976, 2691
 Bramley, P. M. 2898
 Bramwell, A. F. 2326
 Branas, J. 5828
 Brandes, D. 3697, 8671
 Brandis, A. V. 2198
 Brandscheid, M. 1917
 Brandt, R. D. 2034
 Branc, S. 3390
 Branson, R. L. 2376, 6139
 Branzanti, E. C. 6623
 Brar, J. S. 3671, 3690, 7666
 Brasher, E. P. 3793
 Bratt, P. M. 6085
 Braumiller, T. 2468
 Braun, A. J. 8490
 Braun, H. E. 1173
 Braunger, J. 8311
 Bravdo, B. 1734, 1925, 2553

- Braverman, S. W. 6194
 Brazee, R. D. 872
 Brazil, Universidade de São Paulo 8934
 Brazil, Universidade Federal de Viçosa 8671
 Brazil, Universidade Federal Rural do Rio de Janeiro 4911
 Brčák, J. 4984, 7910
 Breaux, R. D. 4883
 Bredell, G. S. 6326
 Bredmose, N. 3794, 3898, 4675
 Breece, J. 1326
 Breene, W. M. 8668, 8669
 Bregadze, A. G. 513
 Breider, H. 1932
 Brendler, R. A. 3014
 Brenna, E. 8681
 Brennan, E. 1209, 6841
 Brereton, A. J. 8308
 Bressani, R. 7200
 Brewbaker, J. L. 2435
 Brewer, R. F. 5550
 Brewerton, H. V. 480
 Brewster, L. C. 5576
 Brian, C. 41, 42, 1833, 1840
 Brian, P. W. 6122
 Bridle, P. 58
 Briggs, J. B. 3872, 3875, 4663
 Briggs, J. R. 1366
 Briggs, W. R. 1673
 Bringhurst, R. S. 8501
 Bringi, N. V. 2373, 3090
 Brinkmann, H. 7639
 Briški, L. 6558
 Britskii, A. S. 1733
 Brocke, W. v. 9051
 Brodrick, H. T. 8163, 8171
 Broertjes, C. 1352, 3903
 Brogdon, J. L. 2827
 Brondegaard, V. J. 8004
 Brooks, A. V. 2216
 Brooks, J. L. 6933
 Brooks, R. F. 3137
 Brooks, R. M. 3356, 4156, 5670
 Brosh, S. 3763, 3868
 Brovenko, S. F. 2596
 Brown, A. E. 5755
 Brown, B. I. 3094
 Brown, D. A. L. 8134
 Brown, E. D. 8563
 Brown, E. G. 2806
 Brown, G. E. 3907, 5574, 9099
 Brown, G. K. 1515
 Brown, G. N. 1398, 3927
 Brown, G. R. 537
 Brown, J. M. B. 7035
 Brown, J. S. 1673
 Brown, K. M. 911, 1077
 Brown, L. 8614
 Brown, L. C. 5303
 Brown, L. N. 8299
 Brown, N. A. C. 750, 6243
 Brown, R. T. 7119
 Brown, W. C. 2263
 Brown, W. H. 372
 Brownbridge, J. M. 4866
 Browne, K. M. 229
 Browning, G. 7195, 7196
 Broyer, T. C. 173
 Brózik, S. 3355
 Bruce, K. R. 4494
 Bruce, M. I. 8640
 Brückbauer, H. 3582
 Bruemmer, J. H. 9104
 Brueske, C. H. 244
 Bruev, S. N. 3512
 Bruijn, J. 7259
 Bruinsma, J. 7289
 Brulfert, J. 8926
 Brummund, V. P. 557
 Brun, J. 4000
 Brun, P. 9077
 Brun, R. 3554
 Brundert, W. 2303, 2984, 6160
 Brune, W. 1303
 Bruneton, J. 2365
 Bruni, B. 4338
 Brüning, K. 3012
 Brunner, T. 910, 6509
 Bruter, I. M. 2532
 Bruyn, J. W. de 8744
 Bryan, H. H. 1282, 6073
 Bryan, P. J. 7917
 Brydon, P. H. 7040
 Brynza, A. I. 5935
 Bubán, T. 4262, 5743, 8460
 Bubarova, M. 2902, 7667, 8978
 Bubentsov, S. T. 8653
 Büblövä, J. 7081
 Bucci, B. T. 3050
 Buchanan, D. W. 1827
 Buchanan, G. F. 3308, 7164
 Buchi, J. 6049
 Buchmann, I. 5847
 Buck, G. 3518, 3523
 Buck, G. J. 7882
 Bucke, C. 8248
 Buckley, D. G. 335
 Buckner, J. S. 7742
 Buclon, F. 6698
 Buczacki, S. T. 7655
 Budanova, V. I. 637, 1205, 8677
 Buddenhagen, I. W. 2435
 Budowski, P. 4005
 Bueso, C. 1538
 Bugala, W. 3906
 Bugarcic, V. 3442, 6541, 6555
 Bugaret, Y. 8560, 8561
 Buiatti, M. 711
 Buitelaar, K. 2858, 7774
 Buitendag, C. H. 4003, 4804, 6350
 Bukatar, E. B. 7588
 Bukina, N. V. 8045
 Bukovac, M. J. 501, 1218, 2631, 2885, 3495, 5054, 6620, 7431
 Bulatović, S. 2607, 6656
 Buldini, F. 2494
 Bulit, J. 8560, 8561, 9109
 Buljko, M. 3508
 Bull, R. M. 1637, 8236
 Bull, T. A. 1645
 Bulsink, A. J. 7016
 Bulum, D. 3508
 Bumbieris, M. 6756
 Bünemann, G. 869, 4971, 4972, 7370, 7535, 8795, 8796
 Bunjamin 4078, 8273
 Bunt, A. C. 3840, 8589
 Bunt, J. A. 7948
 Burbott, A. J. 1412, 3025
 Burbutis, P. P. 4540
 Burchill, R. T. 2576, 4985, 5751
 Burckhardt, F. 3858
 Burden, R. S. 3719
 Burdett, A. N. 1977, 6788
 Burdine, H. W. 5916
 Buren, J. P. van 2609
 Buren, L. L. 4104
 Bureš, V. 6275
 Burešová-Pazdírková, B. 5506
 Burg, S. P. 1235, 2059, 2065, 2066, 3335, 4508, 4511, 4512, 8630
 Burgers, L. J. 6501
 Burghardt, H. 2227, 6224
 Burgis, D. S. 2110, 2860, 6144, 6890, 6914, 7797
 Burkart, A. 4243
 Burke, D. W. 181, 5241
 Burmeister, P. 7058
 Burmistrov, A. D. 2666
 Burnett, W. M. 1290
 Burns, E. E. 9089
 Burns, R. M. 798, 3992, 4001, 4783, 5554, 5572
 Burnside, K. R. 1885
 Burov, D. 2024
 Burrage, S. W. 3296
 Burrell, J. W. K. 2326
 Burrridge, J. C. 7874
 Burstall, S. W. 3906
 Burton, C. 7481
 Burton, G. W. 8309
 Burt, B. L. 20
 Burundi, Institut des Sciences Agronomiques 4031, 4786
 Burwieck, J. 709
 Burzo, I. 7373, 8413
 Busch, L. V. 3325
 Buschbom, U. 8426
 Bushkova, L. N. 7614
 Buslig, B. S. 4021, 4815
 Buss, A. 8671
 Bussell, W. T. 6115, 7811
 Bussler, W. 865
 Butani, D. K. 2470, 9255
 Butcher, D. N. 2129
 Butenko, L. T. 1456
 Butkov, A. Ya. 5068
 Butler, J. 8768
 Butler, K. P. 7657
 Butrimova, L. V. 2544
 Butruille, D. 7106
 Butt, D. J. 4210
 Butt, V. S. 5174
 Butters, R. E. 718, 3842
 Buttery, R. G. 5368
 Button, J. 1468, 1471, 6243
 Buttrose, M. S. 7594, 8573
 Buvat, R. 1487
 Bux, Q. 6886
 Buxo, D. A. 8235
 Buziashvili, I. Sh.,
 B'yalik, L. M. 5874
 Byast, T. H. 1051
 Bychenko, I. I. 1915
 Bychenko, I. N. 1915
 Bychenko, N. I. 1883
 Byers, R. E. 1026, 2006, 5776
 Bykhovtsev, B. G. 1773
 Bylov, V. N. 2918
 Byrd, C. D. 6325
 Byrde, R. J. W. 1747
 Byther, R. S. 4097
 Bziava, R. M. 3288
 Bziava, S. M. 3109
 C., R. 1658
 Cabras, P. 3574
 Caccia, R. 3587
 Cadima, Z., A. 4843
 Cafati K., C. R. 5234
 Cahoon, G. A. 3591, 4335, 8456
 Čahun, O. 6515
 Caia, R. 2097
 Cain, J. C. 2558, 4196
 Cain, J. D. 646
 Cain, R. F. 2618, 3449
 Cairaschi, E.-A. 1000
 Cairns, T. 4001
 Calabrese, F. 893, 1520, 5544
 Calabrese, G. 6190
 Calavan, E. C. 2387, 2391, 4001, 6328, 7141
 Caldarola, M. 3984
 Calderbank, A. 6905
 Caldes, G. 6035
 Caldugno, F. R. 8727, 8728, 8729
 Caldwell, T. H. 3299
 Callow, J. A. 8662
 Calmon, J. L. S. 3255
 Calnaido, D. 4899, 7265, 9270
 Calò, A. 586, 587, 591
 Calot, L. 1212
 Calvani, L. 6380
 Calvert, A. 886
 Calvert, D. V. 3119
 Camacho, E. 1666
 Camargo, A. P. de 8671
 Camargo, L. de S. 5814
 Camargo, P. N. 3197
 Camargo, P. N. de 2018
 Cambraia, J. 1303
 Cameron, H. R. 7475
 Cameron, J. W. 6329
 Cammarano, P. 657
 Campbell, A. I. 2528, 7375
 Campbell, C. W. 1531, 8124
 Campbell, J. A. 3790
 Campbell, J. E. 7408
 Campbell, M. M. 1473, 1474, 1493, 1494, 1495
 Campbell, W. F. 2012
 Camper, N. D. 252, 3478
 Campo, M. 3327
 Campo, S. A. 7121
 Campos González, C. F. 1576
 Canada, Agricultural Research Institute of Ontario 7488, 8314, 8836
 Canada, British Columbia Department of Agriculture 3370, 3494, 3603, 3882, 6667
 Canada, Conseil des Recherches Agricoles, Québec 4170, 5883, 6668
 Canada, Department of Agriculture, Research Branch 2515, 2669, 2734, 2910
 Canada, Lower Mainland Horticultural Improvement Association 8500
 Canada, Ministère de l'Agriculture et de la Colonisation, Québec 538, 1719, 1944, 2154
 Canada, Nova Scotia Fruit Growers' Association 5694, 5695, 5696
 Cañas Prieto, G. 4553
 Cancel, L. E. 1587
 Canevascini, V. 2710, 3587
 Canfield, E. R. 6202
 Canham, A. E. 15
 Cannata, F. 6380
 Cannell, M. G. R. 4864
 Cannon, J. M. 3791
 Cantliffe, D. J. 634, 635, 1136, 1144, 2746, 4463, 4562, 5967
 Canvin, D. T. 7709
 Capesius, I. 3942
 Capó, B. G. 9245
 Capoor, S. P. 6754, 9090
 Caporale, G. 9055
 Capot, J. 1569
 Capozzi, A. 9055
 Cappellini, P. 3491, 5792
 Cárdenas B., R. 5794
 Cárdenas R., R. 5794
 Cardeño, V. A. 1595
 Cardinali, L. R. 4073
 Cardini, F. 5726
 Cardoso, A. P. da S. 8125
 Carel 4027
 Carel, P. 4026
 Carew, D. P. 2345
 Carl, K. P. 31, 2469, 5051
 Carlier, G. 274, 7865
 Carlson, R. F. 4178, 4182, 4220
 Carlson, W. C. 8687
 Carlson, W. H. 1335, 1342, 2195, 2281, 2931, 6218, 8867
 Carman, N. J. 2942, 6286
 Carmona B., C. 6842
 Carnegie, A. J. M. 7248, 7249, 8234, 8241, 9248
 Carnevali, A. A. 8103
 Caron, J. E. A. 743
 Carpena, O. 492, 508, 3114, 3139, 6479, 8088
 Carpenter, E. W. 2088
 Carpenter, G. T. 4201
 Carpenter, J. B. 1513
 Carpenter, P. N. 8496
 Carpenter, S. 965
 Carpenter, W. J. 1335, 1342, 2195, 2281, 2284, 2931, 5477, 6218, 8867
 Carr, A. H. 4593
 Carr, D. J. 7283
 Carr, L. H. 7043
 Carrante, V. 2420
 Carrera, C. J. M. 2770
 Carroll, D. E. 7592
 Carroll, V. J. 2125
 Carroll, B. R. 9246
 Carroll, D. E., Jr. 1898
 Carroll, J. W. 6132
 Carruzze, C.-H. 5104
 Cartechini, A. 564, 1521, 1818
 Carter, A. R. 4612, 8941
 Carter, G. A. 2041, 2042, 7193

- Carter, G. E., Jr. 3478
 Carter, G. H. 557, 597, 1081
 Carter, H. B. 5178
 Carter, J. L. 1647
 Carter, M. V. 3437
 Carter, R. D. 4021, 4815
 Carter, R. L. 1036, 1845
 Caruso, P. 2159, 5159
 Carvalho, B. C. L. de 4467, 5235, 8671
 Carver, R. B. 1885
 Cary, J. W. 6939
 Cary, P. R. 1813, 3994, 6479
 Cas, S. 2458, 6413
 Casamayor Garcia, R. 5605
 Casamayor, R. 4790
 Case, M. W. 7759
 Cash, J. N. 4391
 Caspi, E. 9014
 Cass, D. D. 323
 Cassagne, C. 2829
 Cassibba, L. 6379
 Cassidy, J. C. 7603
 Cassin, J. 3155
 Castelfranco, P. A. 2779
 Castillo, Z. J. 391
 Castle, W. S. 3102
 Castro F., J. 4257
 Castro, F. R. O. 360
 Castro, L. A. B. de 5328, 6113
 Castro M., J. R. 5794
 Castro, P. R. C. 6934
 Catalina, L. 8112, 9111, 9112
 Catani, R. A. 3199
 Cătara, A. 4792
 Catarino, F. M. 8948
 Cathey, H. M. 6152, 8946
 Catzeffis, J. 468, 1779
 Caubergs, R. 3716, 7715
 Caudwell, A. 5128, 5853
 Cavazzutti, G. 3050
 Cavé, A. 2365, 7103, 8026
 Cave, P. R. 217
 Cavicchi, G. S. 3780
 Cayrol, J.-C. 1313, 3841
 Cazelles, O. 6567
 Čech, M. 7910
 Cedillo S., N. 5794
 Ceglowski, M. 946
 Celebrar, P. R. 2437
 Celestre, M. R. 2701, 3557, 3593
 Centrum voor
 Champignonenteelonderwijs 6120
 Ceponis, M. J. 2756
 Cercos, A. P. 9066
 Cerff, R. 7980
 Čermak, N. 2520
 Cermeli L., M. 8459
 Cermelli, M. S. M. 8626
 Cerny, J. 5005
 Cerrizuela, A. E. 8207
 Cerrizuela, E. A. 9237, 9238
 Červinka, K. 3412, 4992
 Cesar, G. 6698
 Cesari, A. 4326
 Cessari, A. 1507
 Ceustermans, N. 8646
 Cha, J. W. 1179
 Chaban, I. P. 6549
 Chaban, V. S. 5193, 6797
 Chachin, K. 8800
 Chacko, E. K. 3237, 3241, 7204, 7216
 Chadha, K. C. 8621
 Chadha, K. L. 4064
 Chadwick, A. V. 6209
 Chadwick, D. L. 5254
 Chagas, C. M. 3634
 Chailakhyan, M. Kh. 4645, 7738
 Chakladar, B. P. 3223
 Chakrabarty, M. 1436
 Chakraborty, D. P. 8032
 Chakravartee, J. 1661
 Chakravarti, B. P. 650
 Chalkley, R. 3745
 Chalkov, I. 1079
 Chal'kova, M. 1269, 6039, 8753
 Challen, D. I. 6632
 Challice, J. S. 1839, 6646
 Chaloupecky, V. 5428
 Chalutz, E. 2141, 3152, 7152
 Chaly, N. 5314
 Chamberlain, J. D. 640, 1058
 Chan, H. T., Jr. 9203
 Chan, H. Y. 5643
 Chan, K. W. 2459
 Chan, P. Y. 7252
 Chan, W. S. 4752
 Chan, W. W. 5010
 Chandapillai, M. M. 4067, 4076
 Chander, M. S. 6295
 Chandler, K. J. 1638
 Chandler, R. F., Jr. 4
 Chandorkar, K. R. 133
 Chandra, A. 166, 7842
 Chandra, G. R. 3720
 Chandra, S. 204
 Chandrasekera, L. B. 9207
 Chandrasekharan, S. 2355
 Chandry, L. 9022
 Chaney, D. H. 7451
 Chang, F. C. 8031
 Chang, F. Y. 3660
 Chang, H. 2467, 7239
 Chang, H. Y. 5132
 Chang, K. P. 373
 Chang, N. C. 4644
 Chang, P. 7220
 Chang, P. J. M. 429
 Chang, S.-T. 5382
 Chang, V. C. S. 4082
 Chang, Y.-P. 5453
 Chang, Y. P. 8923
 Channabasavanna, G. P. 5495
 Channon, A. G. 6083
 Chanturiya, I. A. 6344
 Chanukvadze, M. A. 7169
 Chapelle, J.-P. 6321, 9020
 Chaplin, M. H. 2657, 4233
 Chapman, G. W., Jr. 2044
 Chapman, J. M. 6786, 6945
 Chapman, L. S. 1628, 1631
 Chapman, P. J. 5427, 7282
 Chapot, H. 8074, 9091
 Chari, M. S. 3727
 Charles, W. B. 2133
 Charlwood, B. V. 6319
 Charmbury, H. B. 8857
 Charrier, A. 1586, 6859
 Chartier, P. 3296
 Chasandoerjat, I. S. 2480
 Chase, B. R. 4583
 Chase, J. B. 3739
 Chassevent, F. 1585
 Chatrath, M. S. 2601
 Chatterjee, A. 1452, 2355, 6310
 Chatterjee, S. 1297
 Chatterjee, S. K. 1297
 Chaturvedi, H. C. 351, 8087
 Chaudhary, R. C. 247
 Chaudhuri, M. K. 4767
 Chauhan, K. S. 234, 1273, 8616
 Chauhan, M. G. 4757, 4758
 Chauhan, R. S. 3210
 Chavarria, C. P. L. 8647
 Chavdarov, I. 7812
 Chávez de Rivera, O. G. 5575
 Chebotava, T. F. 8443
 Chebotar', E. I. 3513, 4293
 Chebotareva, M. V. 3289
 Chee, K. H. 1078
 Chee Kok Chin 8792
 Cheema, S. S. 7143
 Chelombit'ko, V. A. 1429
 Chemarin, N. G. 737, 753, 3909
 Chen, C. C. 7960
 Chen, C. F. 7239
 Chen, C. H. 3303
 Chen, C. P. 7220
 Chen, C. T. 7243
 Chen, K. T. 6420
 Chen, M. C. 7220
 Chen, M. H. 2388
 Chen, S. H. 431
 Chen, Y.-L. 2150
 Chen, Y.-M. 4482, 9204
 Chenchen, E. 9203
 Cheng, I. H. 2952
 Cheng, S. 8822
 Cheng, S. S. 1303
 Cheng, Y. 2855
 Cheng, Y. H. 2151
 Chennevière, E. 3405
 Chentsov, Yu. S. 8901
 Chenulu, V. V. 7086
 Cheong, Y. W. Y. 7252
 Cherepakhin, V. I. 465, 925
 Chernenkov, A. A. 7588
 Chernova, L. A. 1166
 Chernukhina, A. P. 6079
 Chernyaev, N. G. 7653
 Chernyavskaya, T. N. 161
 Chernykh, N. A. 6188
 Chernysheva, L. M. 5278
 Chernyshova, G. F. 2552
 Chesneaux, M.-T. 5201
 Chestnaya, V. A. 1933, 2521
 Chetvertakov, A. V. 1802, 1803, 2606
 Chhatper, H. S. 3210
 Chhonkar, P. K. 4497, 5271
 Chhonkar, V. S. 3227
 Chi, H. J. 784, 785
 Chi, P. 2047
 Chiang, M. S. 3652, 3655
 Chiapparini, L. 6065
 Chiarappa, L. 1692
 Chiba, M. 7580
 Chibbar, R. N. 2930, 4632
 Chicco, C. F. 8103
 Chichester, C. O. 5365
 Chien-Chang Hsu 3905
 Chien, M. 6303, 8029
 Chiesa, M. 2710
 Chikazumi, S. 5577
 Chikov, V. I. 8710
 Child, R. D. 5746
 Childers, N. F. 436, 6472
 Chingova-Boyardzhieva, B. 7986
 Chiou, C. M. 8822
 Chipman, E. W. 2081
 Chirikdjian, J. J. 5486
 Chisholm, D. 1951
 Chitale, S. D. 8116
 Chitkara, S. D. 8075
 Chitzanidis, A. 2624
 Chiusoli, A. 28, 79, 6627
 Chizh, O. D. 6535
 Chkhaidze, D. Kh. 3019
 Chkhaidze, G. I. 3267
 Chkuaseli, T. Ya. 5137, 5866, 7581
 Chládek, M. 2352, 2368, 3083, 4728, 5490, 6249, 7081, 7098
 Chlebowska, D. A. 7491
 Chlyah, A. 2223
 Ch'ng, G. C. 8130
 Ch'ng Guan Choo 4837, 8130
 Cho, H. O. 1256
 Cho, Y. K. 674
 Chod, J. 3704, 6149
 Chodzhukov, M. 1406
 Choe, H. S. 5256
 Choe, H. T. 4498
 Chogovadze, R. N. 3274
 Chohan, G. S. 8104
 Chohan, J. S. 4818, 7160
 Choi, E. H. 982, 983, 984, 1034, 1035, 1256
 Choi, H. J. 3052
 Choi, S. Y. 1180
 Chong, C. 972, 5010, 5712
 Choplin, G. 5342
 Chopra, S. K. 3209
 Chopra, S. L. 6486
 Chorin, M. 3325, 4066
 Chou, H. E. 8668
 Choudhary, K. G. 756
 Choudhary, K. G. 1408
 Choudhary, S. L. 3937
 Choudhuri, J. M. 3233
 Choudhury, B. 1194, 3782, 5948, 6050, 6874
 Chour, V. 3044
 Choureitah, A. 7370, 7535
 Chowdappan, S. R. 1252, 2477
 Chowdhury, A. R. 8012
 Chowdhury, T. K. D. 3239
 Chrimis, J. R. 7641
 Chrispeels, M. J. 4591
 Christensen, J. V. 3443, 3444, 3445, 3504, 5021, 7430
 Christensen, L. P. 1106
 Christensen, M. 7054
 Christensen, O. V. 1350, 3914, 6991
 Christoph, W. 464, 1751, 1769
 Chroboczek, E. 5881, 7604
 Chromiński, A. 6935
 Chu, H. T. 7240
 Chu, M. C.-Y. 2106
 Chu, T. L. 8255
 Chubb, W. R. 8857
 Chubey, B. B. 8656
 Chumakovskii, N. N. 4513
 Chundokova, A. A. 5701
 Chung, A. H. 3854
 Chung, B. S. 2359
 Chung, C. C. 1445
 Chung, H. D. 1238
 Chung, H. S. 1312, 1748, 3052
 Chung, J. I. 8805
 Chung-Shih Tang 8170
 Chupeau, Y. 4146
 Churata-Masca, M. G. C. 6934
 Churchill, M.-E. 4683, 6207
 Churchward, E. H. 6450
 Chvojka, L. 47, 4996
 Chylinska, K. M. 137
 Cialone, J. C. 624
 Ciatti, B. 3167
 CIBA - GEIGY Ltd. 6491
 Cifranić, P. 7446
 Cigliano, G. 816, 5591, 7165, 7166
 Cilliers, C. J. 1491
 Cinar, Ö. 5248
 Cionini, P. G. 198
 Ciriari, R. M. 8531
 Cirillo, A. 3472
 Ćirjaković, M. 7471
 Ciudad B., C. 5263
 Civerolo, E. L. 511, 5768, 6633
 Claessens, J. 5822
 Clagett, D. C. 8995
 Claret, H. 1826
 Clark, C. A. 8737
 Clark, L. R. 2501
 Clark, M. F. 4502
 Clark, R. A. 2161
 Clarkson, D. T. 8308
 Claus, S. 7639
 Clausen, G. 3860, 6992
 Claus, E. 8633
 Claus, W. 3942
 Clawson, M. 4
 Clay, D. V. 1683
 Clayberg, C. D. 673
 Claypool, L. L. 2615
 Clayton, C. N. 1816, 7450
 Clayton, J. E. 8257, 8260
 Cleaver, T. J. 2739
 Cleland, R. 6012
 Clements, H. F. 6479
 Clements, R. F. 1889, 1890
 Clements, R. H. G. 5257
 Cleveland, M. L. 3477
 Clifford, D. R. 7385
 Clore, W. J. 557, 597, 1081
 Close, R. C. 7631
 Co, H. 1665
 Coates, P. L. 828
 Cobb, A. 153
 Cobet, M. 9054
 Cobiainchi, D. 1025, 3424, 3485
 Cobra Neto, A. 7703
 Coburn, G. E. 8193
 Cochran, H. L. 6046
 Cochran, H. S. C. 4733
 Cocking, E. C. 1673, 2202
 Cockroft, B. 6628
 Cockshull, K. E. 272, 1401, 2191, 3296
 Coccozza, M. 4662
 Coenen, K. 8487
 Coffee, R. 5674
 Coffey, D. L. 545
 Coggins, C. W., Jr. 5569
 Cohen, A. 5548, 5579

- Cohen, E. 3153, 6347
Cohen, J. 5560
Cohen, M. 7459
Cohen, R. 3776
Cohen, S. 3808
Cohen, Y. 1986
Cohen, Z. 3677
Cohn, E. 2484
Coic, Y. 1988, 2682, 6479, 8308
Coilier, P. 3798, 7618, 7650, 7651, 7680, 7681, 7776, 7817, 7824, 8510
Coirier, J.-M. 1258
Colantonio, V. 3499, 3579
Colbrant, P. 1000
Cole, H. 3829
Cole, H., Jr. 1210
Cole, H. Jr. 1211
Cole, J. R. 7101, 8028
Coleman, R. L. 4023
Coleno, A. 5246
Colin, J. 4232
Colladay, C. 4001
Collier, P. 4908
Collina, A. 2506, 4142
Collingwood, C. A. 3182
Collins, F. W. 133
Collins, R. P. 4644, 9003
Collins, W. B. 3530
Collip, H. F. 5225
Colliva, V. 320
Collura, A. M. 7077
Colmenares C., S. 4554, 5240
Colombo Diaz, R. 7634
Colombo, R. 8727, 8728
Colonna, J. P. 8155
Colquhoun, A. J. 5940
Coman, T. 8474
Comba, D. 2417
Combettes, S. 3841
Combier, H. 9065
Combrink, J. C. 5008, 5145
Comer, A. E. 3901
Commodaro, M. 5845
Compagnon, M. P. 864
Condé, A. Dos R. 2036
Condé, A. R. 1009
Condon, B. N. 4125
Cone, W. W. 7093
Connor, L. J. 1200
Connor, M. D. 3904
Conover, C. A. 1389, 7025, 7045
Conreur, C. 8026
Conroy, J. J. 243
Conseil International pour le Développement du Cuivre 1694
Considine, J. A. 4356
Constantine, G. H., Jr. 2988
Constantinescu, G. 7555, 8538
Constantinescu, I. 7567
Constantinescu, Irina 7567
Constantinescu, V. 8624
Conti, G. G. 1409, 1410
Continella, G. 792, 793, 803
Converse, R. H. 2686, 5810
Cook, A. A. 2848
Cook, C. 1988
Cook, R. J. 3316, 8750
Coolen, W. A. 1393
Cooley, E. J. 8997
Cooley, T. N. 8706
Coomans, P. 2456, 2457, 4068
Coombe, B. G. 4264, 4356
Coombs, J. 8248
Cooper, A. J. 682, 4920
Cooper, D. R. 49
Cooper, W. C. 3148, 8084
Coopmans, J. H. J. M. 6775
Coorts, G. D. 1866
Coote, G. G. 3428, 6595
Copley, E. F. 7233
Coppock, G. E. 4011, 4013
Coral, F. J. 9142
Corbaz, R. 5858
Corbet, P. S. 2501
Corbin, H. B. 1770
Corcoran, M. R. 2825
Corduan, G. 9051
Corgan, J. N. 1247, 5042
Corley, R. H. V. 1602, 2459, 3244, 9184
Corley, W. L. 2934, 3859
Cormack, D. B. 3308
Cormeli, M. M. 8788
Cornic, G. 7073
Corpuz, L. C. 2074
Correa, N. S. 9264
Correll, F. E. 1816
Corrias, G. 4025
Corrie, W. J. 4433
Cortes, A. J. 1904
Cortés-Monllor, A. 669, 8227
Cortés Monllor, A. 8228
Corvi, C. 7301
Cory, L. 5853
Cosarinsky, A. M. de 8603
Cosevska, O. 7445
Cosevski, B. 7445
Cossins, E. A. 3675
Costa, A. S. 4797
Costa, C. P. Da 1182
Costa, F. 3139, 8088
Costa, G. 28, 482, 1023, 1848, 1849, 6583
Costa, J. G. C. da 3695, 8671
Costa, M. C. B. 5890
Costa, P. 1071, 1190
Costa Rica, Instituto Interamericano de Ciencias Agrícolas de la OEA 5971
Costa, S. I. Da 359
Costacurta, A. 5846
Coster, J. De 4176
Coster, J. de 7418
Coster, J. De 8383
Costilla, M. A. 5655
Costin, J. J. 3522
Cotter, D. J. 1247
Couch, H. B. 740, 2207
Couchman, R. 6783
Couey, H. M. 4303, 8409
Coupé, M. 3254
Couprie, F. 1549
Courduroux, J.-C. 2749
Coursey, D. G. 4147
Court, W. E. 3073
Courter, J. W. 8491
Cousin, M.-T. 762
Cousin, R. 6859
Coussio, J. D. 772, 777, 2348, 3964, 9043
Couvillon, G. A. 4249
Coviello, R. L. 33
Cowan, I. R. 2509
Cowan, R. F. 7638
Cowles, J. R. 1234, 7734
Cowley, P. S. 1448, 2357, 3075, 8019
Cowling, E. B. 3316
Cox, E. A. 7772, 7864
Cox, E. F. 5673
Cox, J. E. 1478
Cox, R. S. 2937
Cox, T. I. 2017, 2078
Coxon, D. T. 6463
Coyne, D. P. 2022, 2023, 7696
Cradock, F. W. 1478
Craft, C. C. 4806
Craig, D. L. 3543, 5811
Craker, L. E. 448, 2015, 3668, 4633
Cram, W. J. 2899
Cram, W. T. 8500
Crandall, B. S. 4827
Crandall, P. C. 640, 1058, 2684, 5087, 8500
Crane, E. 5899
Crane, G. L. 7943
Crane, J. C. 994, 1039, 3503, 7424
Craner, E. A. 3196
Cranham, J. E. 30
Craster 4901, 4905
Crawford, H. M. 4607
Creager, R. A. 8
Crecsimanno, F. G. 6376
Creighton, C. S. 4427
Cremonini, R. 198
Crescimanno, F. G. 7442
Crête, R. 3652, 3655, 7751
Crettenand, J. 1115
Crevasse, J. M., Jr. 5388
Cricoveanu, R. 7307
Criley, R. A. 1566, 6157
Crill, J. P. 2873
Crill, P. 2110, 2854, 2860, 6914, 7797, 7799
Cripps, J. E. L. 1731
Crisp, A. F. 7612
Cristoferi, G. 540, 1846
Crivelli, G. 1814, 1815
Črňko, J. 3383
Crocker, T. E. 3995
Crocomo, O. J. 4060
Crofts, J. 3659
Croker, S. G. 2073
Crombie, L. 7955
Cronshaw, J. 7691
Crooke, M. 7035
Crooke, W. M. 7873, 7874
Cropley, R. 4205
Croquelois, G. 1427
Cros, J. 9065
Crosbie Cochrane, H. S. 4733
Croteau, R. 1412, 3025
Crowder, R. A. 2826
Crowdy, S. H. 1223, 1224
Crowe, A. D. 5694, 5695, 5696
Crozier, J. A., Jr. 9191
Crüger, G. 1191, 3626, 5891
Cruz, B. P. B. 4532, 5814
Cruz, R. de la 5651
Cruz, V. F. da 6479
Cuevas-Ruiz, J. 1596
Cummings, G. A. 1019
Cummins, J. 929
Cummins, J. C. 5702
Cummins, J. N. 5018
Curtis, C. E. 33
Curtis, R. W. 3721
Curto, S. 5381
Curvale, J. P. 7652
Cus, M. 7609, 7610
Custódio, J. 9172
Cutcliffe, J. A. 1881, 3657, 3658
Cuthbert, R. B. 4427
Cutting, C. V. 7320
Cutuli, G. 4800, 5556, 6358
Cvasnii, D. 7482
Cvetković, D. 6629, 7447
Cyprus, Agricultural Research Institute 3345, 3560, 3604, 3980
Cyriac, P. V. 4666, 9062
Czechoslovakia, Akademie Zemědělská 5881
Czechoslovakia, Průhonice Research Institute of Ornamental Horticulture 2908
Czechoslovakia, Research Institutes for Crop Production 6713
Czechoslovakia, Výzkumný Ústav Chmelářský 7088
Czechoslovakia, Zemědělská Akademie 6477, 6478
Czygan, F. C. 9053
D., S. K. 854, 3273
Dadiani, R. G. 7271
Dadoun, H. 8026
Daelemans, A. 8791
Daepf, H. U. 5012
Daft, G. C. 3915
Dahlenburg, A. 6651
Dahlsson, S. O. 2973
Dahmen, W. J. 4261
Dähne, D. 2621
Daigger, L. A. 3894
Dailey, R. T. 5144
Daines, R. H. 485
Daito, H. 2413, 7325
Dakwa, J. T. 4847
Dalal, V. B. 4872
Dalbro, K. 724
Dalchow, J. 8945
Dale 4107
Dale, J. L. 2972
Dale, P. S. 4302
Dalessandro, G. 7635
Daletskaya, I. A. 2060
Dall'Acqua, F. 9055
Dallenger, J. 6115, 7811
Dalmasso, G. 1086
Daly, P. 5918, 7686, 7770, 8759
Daly, P.-M. J. 1271
Dam, J. Van 8913
Damavandy-Kozakonane, H. 1817
Dame 8733
Damiani, P. 6784
Damigella, P. 502, 792, 793, 803
Damon, R. A., Jr. 4997
Dana, M. N. 1062, 4219, 5093
Danailov, B. 6749
Dancsné Rozsnyai, Z. 7423
Daneau, J. 8742
Danev, S. 7349
Daniel, C. 9151
Daniell, J. W. 78, 2643, 5056, 8543
Daniels, J. 8192, 8219
Danilov, M. D. 1045
Danko, J. 7387
Dan'kov, V. C. 8489
Dantur, N. C. 370
D'Aoust, A. L. 7709
Darbyshire, J. F. 4938
Daris, V. T. 7586
Darley, E. F. 1020
Darrow, G. M. 4321
Dart, P. J. 4103
Darwent, A. L. 3304, 5283
Das, B. C. 1355
Das Chowdhury, T. K. 3239
Das, G. 6789
Das, K. C. 8032
Das, N. 9134
Das, P. K. 665
Das, P. K. 2492
Das, P. K. 8295
Das, R. C. 7755, 8739
Dasgupta, D. R. 2878
Dasgupta, S. K. 7981
Dash, P. C. 6396
Daskalov, D. 1907
Daskalyuk, A. P. 6097
Dastane, N. G. 8741
Dastidar, P. P. G. 349
Date, N. 6133
Date, W. B. 8412
Dathan, A. S. R. 400
Datta, P. 3219
Datta, T. 8013
Datunashvili, E. N. 7595
Daubeny, H. A. 539, 1054, 1055, 1863, 5809, 8500
Daulta, B. S. 556
Daunicht, H. J. 6353
Dauple, P. 3554
Dausend, B. 4240
D'Auzac, J. 3254, 7228
Dave, G. S. 6823
Davenport, D. C. 2424, 2630, 4239, 6355
Davet, P. 4569
David, D. J. 7713
Davide, R. G. 8078
Davidek, J. 3330
Davidson, R. M., Jr. 4671
Davidson, T. R. 80, 4236
Davidyuk, L. P. 753, 4268
Davies, B. H. 2898
Davies, D. R. 873, 2048, 2232
Davies, J. A. 2557, 2794
Davies, J. N. 2135, 2137
Davies, M. E. 319, 1394, 1395
Davies, P. J. 2795, 3714, 3849, 6869, 8696
Dávila Flores, G. 5794
Davis, C. P. 4540
Davis, D. W. 8668
Davis, F. S. 5226
Davis, H. C. 86
Davis, J. F. 6687
Davis, J. T. 4481
Davis, P. L. 6366, 9104
Davis, S. 2376
Davis, T. A. 4831, 6372
Davis, W. W. 46
Davison, A. D. 4709, 5810
Davison, J. G. 1683
Davison, R. M. 480
Davtyan, N. G. 6938

- Dawidar, A. A. M. 4777
 Dawidar, A. M. 4777, 8595
 Dawson, J. R. 2488
 Daxl, R. 5623
 Day, H. 8419
 Day, J. M. 4103
 Day, J. R. 2145
 Day, M. 8798
 Dayton, D. F. 1777, 3374, 4995
 D'Cruz, R. 9218
 De, G. N. 3208
 De, R. 5926
 De Vries, D. P. 5801
 De Wolfe, T. A. 6329
 Deal, D. R. 1105
 Deason, D. L. 4015
 Deb, D. L. 2878
 Debelyi, A. S. 3062
 Debergh, P. 7849
 Debie, J. 4685
 Debor, H. W. 4161, 7409, 8483
 Debray, M. 1427
 Decheva, R. 338, 339, 2323, 3952
 Decker, H. 5605
 Declaire, M. 1228
 Decourtaye, L. 3415
 Dècei, L. 5528
 Defrawi, M. El 7147
 Degeyter, L. 7527, 8808
 Deidda, P. 800, 4007
 Deiser 6143
 Deiser, E. 6782
 Deist, J. 120, 145, 3802, 5192, 8452, 8619, 8620
 DeKock, P. C. 3299
 Delabarre, M. 4077, 6421
 Delbos, R. 510, 1808
 Delchev, L. 7697
 Delfino, E. P. 1761
 Dellacecca, V. 8605
 Delley, B. 2658
 Delmas, J. 8821
 Delorme, M. 4051
 Delplanque, A. 7823
 Demetradze, T. Ya. 3131, 8265
 Demetriades, S. D. 993, 1041, 1486
 Demirören, S. 510, 1808
 Demirovski, A. 5714
 Demo, M. 3436
 Dempsey, W. 7521
 Dempsey, A. H. 2844, 2934, 3859
 Dem'yanets, E. F. 6589
 Dener-Madsen, G. 3889
 Deng, Q. 1954
 Denikeeva, M. F. 2334
 Denisen, E. L. 549
 Denisov, P. V. 3754
 Denisova, E. K. 1430
 Denmark, Almindelig dansk Gartnerforening 3298
 Denmark, J. C. 2269, 3002
 Denmark, Spangsbjerg Forsøgsstation 5372
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 6791
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 3548, 3823
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 3918
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 3931, 4629
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 4665
 Denmark, Statens Forsøgsvirksomhed i Plantekultur 4698, 4722, 5187, 5200, 7071
 Denmark, Statens Planteatologiske Forsøg, Lyngby 4136
 Denmark, Statens Væksthusforsøg 8604
 Dennis, F. G. 926
 Dennis, F. G., Jr. 4235, 5019
 Dennison, R. A. 1504, 4022
 Denoël, A. 6321, 9060, 9061
 Deokar, A. B. 5301
 Deol, G. S. 8760
 Deol, S. S. 3144, 7422
 Department of Agriculture and Fisheries for Scotland 4123
 D'Ercole, N. 1071, 1244, 2283, 3539, 3654
 Dermien, H. 315, 1385, 7441
 Dermine, E. 4232
 Desai, B. G. 6920, 8791
 Deshmukh, V. K. 4773
 Deshpande, R. 7750
 Deshpande, R. S. 6251, 6253
 Deshpande, S. 3174
 Deshpande, S. U. 8116
 Desiderio, E. 1137
 Desjoberg, A. 3962, 3963
 Desmukh, S. K. 2355
 Destandau, G. 1906, 8535
 Deullin, R. 1614
 Deunff, Y. Le 8607
 Dev, G. 8385
 Dev, S. 348, 7105, 9039
 Deventer-Schiemer, H. van 2609
 Deverall, B. J. 3706
 Devetak, Z. 8996
 Deville, J. 4887
 Devlin, R. M. 2691, 5988
 Devochkin, F. A., Sokolova, N. P. 1251
 Devochkina, Z. L. 8898
 Devtyan, V. A. 5842
 Devyatov, A. S. 939, 4969, 4970
 Dewey, D. H. 55, 1775, 3432, 4221
 DeWolfe, T. A. 4001, 4787
 Dey, S. K. 1662
 Dezsö, I. 6614
 Dhaki, A. J. 5628
 Dhaliwal, G. S. 4447
 Dhamane, V. M. 7572
 Dhande, G. W. 7572
 Dhar, K. L. 2246, 6178
 Dhar, M. M. 2362
 D'Hardemare, G. 1310, 1311, 6953
 Dharkar, S. D. 3210
 Dhillon, B. S. 8552
 Dhillon, H. S. 8665
 Dhooria, M. S. 1489, 8233
 Dhua, S. P. 665
 Dhuria, H. S. 9129
 Dias, H. F. 5853
 Diasamidze, Sh. S. 8344
 Diaz, D. H. 2637
 Díaz Peña, A. 8173
 Dick, J. 425, 8234
 Dicker, G. H. L. 1049, 4309
 Dickerson, O. J. 645
 Dickey, R. D. 5388, 7062
 Dickey, R. S. 180, 5247
 Dickinson, D. B. 8793
 Dickinson, H. G. 4661
 Dicks, D. M. 3015
 Dicks, J. W. 4630, 5431, 7846
 Dickson, M. H. 2784, 5978
 Dickson, R. C. 2936
 Die, J. van 2964, 2965
 Dieken, R. van 2278
 Dieleman-van Zaayen, A. 7831
 Diener, R. G. 978
 Dieren, J. P. A. van 5009
 Dierickx, P. J. 8986
 Dieter, A. 7848
 Dietrich, J. V. 6732
 Dietz, M. J. 4607
 Diez, F. B. 5281
 Dijk, A. J. Van 1175
 Dijk, G. E. Van 1370
 Dijkman, A. van 5355
 Dijkstra, J. 6270
 Dilley, D. R. 32, 1363, 2006, 3432, 5690, 7010
 Dilworth, A. E. 6939
 Dimaunahan, L. B. 4527
 Dimchev, V. 572, 4347, 6742
 Dimitrijević, B. 5853, 6683
 Dimitrijević, R. 2522
 Dimitrov, D. 6257
 Dimitrov, G. 8776
 Dimitrov, I. 2337
 Dimitrov, Z. 6070
 Dimitrovski, T. 4270, 6629, 7447
 Dimock, A. W. 1333, 4626, 4627
 Dimond, A. E. 4928, 6923
 Dimopoulou-Lekka, D. 993, 1041
 Dimov, N. 4255
 Dimza, I. Ya. 496
 Din, I. F. G. El 2240
 Dingley, J. M. 9117
 Dinglinger, G. 3361
 Diófási, L. 4334
 Dionigi, A. 6375
 Dipaola, G. 819, 4169
 Dirimanov, M. 6677
 Dirr, M. A. 1063, 8949
 Ditmer, W. P. 7625
 Dixon, G. R. 2757, 5165, 6007
 Djomo, E. 824
 Dmitrieva, L. I. 6725
 Doak, G. O. 5427
 Doazan, J. P. 8536
 Döbereiner, J. 4103
 Dobray, E. 7590
 Dobreanu, M. 7809, 8763
 Dobrescu, V. 7307
 Dobrolyubskii, O. K. 2719
 Dobroserdov, S. G. 3409
 Dobry, J. 4688
 Dobrzanska, J. 7604
 Dodge, J. D. 5202
 Doersch, R. E. 4501
 Dogramadzhyan, A. D. 1927
 Doichev, K. 7367
 Doikova, M. 4547, 4589
 Dolejš, L. 7954
 Dolidze, M. M. 3116
 Dollar, A. M. 2435, 2461
 Dollwet, H. H. A. 224
 Dolphin, R. E. 3477
 Domańska, H. 7333
 Domanskaya, E. N. 7061
 Domenico, J. A. 6105
 Dominguez R., P. F. 1548
 Dominguez R., P. F. 8131
 Domínguez, X. A. 780, 781, 7106
 Donadze, V. Z. 365
 Donald, J. D. 6910
 Donato, M. De 156, 4378, 5231
 Donchev, A. 1098, 4336
 Donchev, D. V. 1033, 1829
 Doncheva, A. D. 8900
 Dongo D., S. 643
 Donini, A. 5175
 Donk, J. A. W. M. Van der 275
 Donnan, A. 5476
 Doodson, J. K. 5165
 Dooley, H. L. 6228
 Döpke, H. 2198
 Döpke, W. 8041
 Doraiswamy, S. 6920
 Doran, S. M. 921
 Dorche, J. 6021
 Dorer, M. 3965
 Dörfling, K. 1155
 Dorge, S. K. 857
 Dorion, N. 4146
 Dorofeeva, E. V. 56
 Dorokhov, B. L. 6573, 8693
 Dorough, H. W. 2033
 Dorozhkin, N. A. 5817
 Dorph-Petersen, K. 724
 Dorsman, C. 1175
 •Dorskotch, R. W. 2370, 5468, 6292, 6320
 Doss, C. K. 8048
 Doss, G. J. 6495
 Dostal, H. C. 1026, 5776
 Dostál, R. 2976
 Dostálek, J. 7376
 Doud, S. L. 4178
 Doughty, C. C. 2684
 Douglas, F. 4920
 Dowker, B. D. 8287
 Dowler, W. M. 3478
 Dowling, C. F. 1559
 Downing, F. S. 4121
 Downing, M. 3028
 Downing, R. S. 957
 Doy, C. H. 4582
 Doyle, J. 1837
 Draganov, D. 5834
 Draganov, D. S. 441
 Draganov, G. 3575, 3576, 5110, 5834, 6741
 Dragland, S. 5299, 5300
 Drahorad, W. 464, 4162
 Drake, C. R. 1749, 1750, 4209
 Drake, M. 469
 Drakes, G. D. 6036
 Drandarevski, C. A. 4140
 Draper, A. D. 1874, 5090
 Drennan, D. S. H. 207
 Drenth, A. van 887, 5683
 Drescher, R. W. 4022
 Drewlow, L. W. 5428, 8858
 Drews, M. 117, 5160
 Drexler, L. 1420
 Drexler, O. 1421, 6280
 Drijfhout, E. 4516
 Drouet, A. 8472
 Drover, D. P. 4144
 Drozd, A. M. 649, 6004
 Drozdova, O. A. 7747
 Drozdovskaya, L. S. 2350
 Drumm, H. 334, 3012
 Drummond, D. B. 2925
 Dryagina, I. V. 874, 6172
 Dryanovska, O. A. 2210
 Drysdale, R. B. 6085
 D'Souza, G. I. 6406
 Du, C. T. 8958
 Dua, S. P. 1625
 Duarte, O. 4789
 Dube, S. D. 3121
 Dubernet, M.-O. 3601
 Dube, C. S. 1405
 Dube, L. N. 7000
 Dubey, R. 1407
 Dubinsky, W. P. 8995
 Dublin, P. 9138
 Dubois, P. 1257
 Dubos, B. 6659
 Dubovenko, E. K. 1229
 Dubravec, I. 3488
 Dúbravková, L. 7954
 Dubuc-Lebreux, M.-A. 1349
 DuCharme, R. P. 3123
 Ducheyne, H. 8808
 Ducrot, V. 2614
 Dudchenko, L. G. 2071, 3746
 Duden, R. 2103
 Dudin, V. C. 6266
 Dudney, P. J. 8318
 Dudok, E. P. 154
 Duensing, G. 876
 Duff, D. M. 8373
 Duff, D. T. 304
 Duffek, J. 6076
 Duffield, A. M. 349
 Duffus, J. E. 4412
 Dufková, V. 4996
 Dufournet, R. 3939
 Duganova, E. A. 4273
 Duggan, J. B. 3397
 Duhan, K. 7486, 8355
 Duich, J. M. 3893
 Dukhanin, K. S. 7350, 8325
 Duleba, K. I. 1843
 Dumitrescu, G. 7482
 Dunaev, V. S. 5873
 Duncan, E. J. 4841
 Duncan, I. 203
 Duncan, W. G. 4
 Dunez, J. 510, 1808
 Dunn, J. A. 1159, 3666
 Dunn, J. S. 1046
 Dunn, R. A. 6570
 Dunn, S. 8307
 Dunphy, P. J. 9004
 Dupnik, T. 7669
 Dupuy, M. 2118
 Duque, F. F. 8671
 Durairaj, P. 4639
 Durairaj, V. 845, 6429
 Durand, J. 6154
 Durand, R. 1311, 6953

- Duranti, A. 4320, 4399
 Durbin, R. D. 5218
 Đurđević, B. 6547, 6555, 6641
 Duret, S. 4727
 Durgin, R. E. 7513, 8492, 8493, 8496
 Durham, L. J. 349
 Durieux, A. J. B. 5424
 Düring, H. 6759, 8568
 Durkee, A. B. 8634
 Durkin, D. 2296
 Durlecher, M. 4028
 Durnerin, A. 6254
 Duron, M. 1833
 Durquety, P.-M. 1906, 8535
 Durst, F. 1960
 Dušková, L. 6274
 Dutcher, R. D. 1779
 Dutova, L. I. 5700
 Dütsch, G. 8828
 Dütsch, G. A. 8827
 Dutt, A. K. 7973
 Dutta, A. K. 9273
 Dutta, C. P. 1452
 Dutta, K. N. 9277
 Dutta, N. L. 6300
 Dutta, O. P. 8644
 Duvekot, W. S. 5749
 Duvenage, A. J. 256
 Dvořák, J. 3395, 4188
 Dvořák, S. 2352, 2368
 Dvoryaninova, K. F. 7857
 Dyadchenko, D. G. 2565
 Dyck, R. 7462
 Dye, D. W. 651
 Dyk, P. J. van 4805
 Dzhabaev, B. R. 4999
 Dzhamalitinov, Kh. 5873
 Dzhamalov, G. 2085
 Dzhanabaev, T. N. 9026
 Džhanashiyi, M. A. 8279
 Džhanashiyi, N. M. 3029
 Džhanelidze, M. F. 8061
 Džhaparidze, I. G. 8944
 Džhaparidze, L. I. 2985, 5137
 Džhashi, V. S. 3279
 Džhavakyants, Zh. L. 944
 Džhikiya, A. I. 3104
 Dzhokhadze, T. I. 2763
 Dzieciol, R. 8402
 Dzieciol, W. 7333
 Dzięwanowska, K. 4637
 Eagles, J. 6783
 Eaks, I. L. 383, 9073
 Early, M. P. 8220
 Early, R. E. 6264, 6265
 East African Agriculture and Forestry Research Organization 6844, 8188
 East African Community, Tropical Pesticides Research Institute 5245, 5617
 East African Industrial Research Organization 4855
 Easterbrook, M. A. 4309
 Eastin, E. F. 6830
 Eastin, J. D. 4
 Eaton, G. W. 1054, 1055, 3597, 4183
 Eaves, C. A. 53, 5695, 5811
 Eavis, B. W. 2053, 2054, 2812
 Ebben, M. H. 8655
 Ebbens, J. L. 8611
 Ebel, R. 6698
 Ebermann, R. 7591
 Ebihara, M. 8126
 Eck, P. 3531
 Eddins, R. 6814, 7678
 Eddy, B. P. 110
 Edelman, J. 259
 Eden-Green, S. J. 6519
 Eder, J. 5931
 Edgerton, L. J. 500, 975
 Edgington, L. V. 2875
 Edison, S. 9249
 Edje, O. T. 2011, 2014, 5973, 5975
 Edland, T. 4216
 Edmunds, J. E. 1543
 Edney, K. L. 486, 5751
 Edrees, M. 1245
 Edwards, G. E. 9260
 Edwards, G. J. 4017
 Edwards, K. J. R. 3852
 Edwards, T. W., Jr. 1067
 Eeden, F. J. Van 232
 Effel, Z. I. 1730
 Efimov, M. S. 4450
 Efter, M. 4006
 Ėgamberdiev, A. R. 3112, 3113
 Egan, B. T. 1635
 Egbe, N. E. 5613
 Egea, L. 492, 508
 Egeraat, A. W. S. M. Van 8716
 Eggenberger, W. 5832, 5833
 Eggens, J. L. 3009
 Egger, E. 5126, 5852, 6735
 Eggers, H. 8859
 Eggert, D. 3787
 Egiazaryan, V. Kh. 5037
 Egle, K. 2915
 Eglit, V. R. 6832
 Egolf, D. R. 321, 2310
 Egorova, L. I. 2060
 Eguagie, W. E. 7201
 Eguchi, H. 6825
 Egurazdova, A. S. 8399
 Eheart, M. S. 3670
 Eehrt, M. 326
 Ehsanullah, L. 1598
 Eichhorn, S. E. 7688
 Eid, K. 8420
 Eijden, J. van 4195
 Eijk, J. P. van 7008
 Eilati, S. K. 4005
 Einert, A. E. 295, 3879, 7958
 Einset, J. 962, 5108, 5829, 7551
 Eisa, H. M. 3625
 Eisenbrandt, K. 1419
 Eisendle, T. 1763
 Eisinger, W. 3335
 Eisinger, W. R. 4512
 Eisner, T. 5415
 Ekambaram, C. 1630
 Ekern, P. C. 9262
 Ekhaugen, K. 4133
 Eklund, E. 5212
 Eksteen, G. J. 8452
 El-Azzony-M. 1479
 El-Badawi, A. A. 8259
 El-Barkouki, M. 2167, 2168
 El-Defrawi, M. 7147
 El-Gamassy, A. M. 2167, 2168
 El-Gazzar, A. M. 1477
 El-Gendy, S. A. 2167, 2168
 El-Ghandour, M. A. 2842
 El Ghandour, M. A. 8756
 El-Goorani, M. A. 4667
 El-Hamady, M. 6378
 El-Kersch, M. 769
 El-Masry, S. 6301, 6302
 El-Minshawy, A. M. 201
 El-Moghazy Shoaib, A. M. 1399, 3079
 El-Nabawi, S. M. 2414, 2439, 2440
 El-Naggar, S. 1479
 El-Olemy, M. M. 776, 1435, 2342
 El-Rahman, A. A. A. 9008
 El-Refai, A. 183
 El-Sayyad, S. M. 1399, 3079
 El-Shabrawy, O. A. 4495
 El-Shamy, A. M. 3049
 El-Sherbeeney, M. R. 5168, 5172
 El-Shestawi, M. 642
 El-Swaifi, S. A. 4888, 6439
 El-Tamimi, A. 5633
 El-Wakil, M. 605
 El-Zeftawi, B. M. 5871
 Elahi, M. A. 9229
 Elarosi, H. 4456
 Elbe, J. H. von 5902
 Eldridge, B. J. 7771
 Elema, R. 6698
 Elenkov, E. 5312, 5343
 Elifving, D. C. 3140, 6356
 Elgamal, M. H. A. 350
 Elgar, K. E. 7302
 Elgawhary, S. M. 4561
 Elgersma, D. M. 4571, 4572
 Elia, M. 7633
 Eliseev, I. P. 5045, 5481, 5482, 5788
 Ellet, C. W. 4719
 Elliott, R. F. 3419
 Elliott, W. M. S. 3738
 Ellis, G. A. V. 6031
 Ellis, J. 3017
 Ellis, J. R. 6242
 Ellis, P. R. 2121
 Ellis, R. 6697
 Ellis, R. J. 4515
 Ellissèche, D. 4369
 Elmanova, T. S. 3479
 Elmer, H. S. 8079
 Elmore, C. L. 2921, 6226, 6227
 Elmore, C. L. 452, 710, 1323, 8913
 Elmstrom, G. W. 5946, 7675
 Elnabauy, S. M. 2414, 2438, 2439, 2440
 Elnabouy, S. M. 2414, 2438, 2439, 2440
 Elioja, A. L. 2437
 Elrick, J. D. 4496
 Else, J. 7979
 Elsevier Scientific Publishing Company 7275
 Embleton, T. W. 798, 4791, 9086
 Emboden, W. 8970
 Embree, C. G. 5694
 Emden, H. F. Van 1697
 Emechebe, A. M. 387
 Emerson, F. 7336
 Emerson, F. H. 911, 1026, 3374, 5776
 Emmert, F. H. 2796, 6479
 Encke, O. 7784
 Ende, B. Van den 1018
 Ende, J. van den 7628
 Endo, R. M. 1168
 Engel, E. 5155
 Engel, G. 471, 6593
 Engel, J. B. van den 7361
 Engelbrecht, D. J. 2575, 3549, 5853
 Engelchik, M. 3801
 Engelhard, A. W. 5405, 6163, 6972, 6973, 8862
 Engelmann, W. 8928
 Engels, E. 4689
 Engelsma, G. 5963
 Engvild, K. C. 9036
 Enikeev, Kh. K. 8430
 Enikeev, S. G. 6014
 Enikov, K. 8775
 Enoch, H. Z. 7949
 Enoch, Z. 3920
 Enriquez C., G. A. 834
 Enzie, J. V. 5718
 Eppendorfer, W. H. 199
 Epstein, W. W. 7966
 Ercolani, G. L. 3984, 4276, 4600, 6915, 6916
 Ereemev, G. N. 4211
 Eremin, G. V. 905, 4244
 Eriksen, E. N. 3747, 5462
 Eriksson, T. 7819
 Erkeev, M. I. 2780
 Ermakova, I. I. 2996
 Ermolova, E. V. 5367
 Erner, Y. 7149
 Ernst, R. 5458
 Errecaborde de Lasserre, E. N. 7831, 8118
 Érsek, T. 2792
 Ershov, I. I. 6026
 Ervin, J. O. 8055
 Eryusheva, E. M. 6268
 Ėsartiya, M. V. 3271, 8268
 Esashi, Y. 730, 8886
 Esayan, G. S. 4230, 5037
 Escaff, M. G. 7131
 Escarria, S. 7106
 Esch, H. van 1962, 1966, 4126, 5185, 6787
 Eschrich, W. 7688
 Esen, A. 7123
 Esenam, E. U. 830
 Eshel, Y. 1267, 2843, 4468, 4549, 5888
 Espinoza P. J. 7235
 Esquerré-Tugayé, M.-T. 5220, 7685
 Essig, W. 8298
 Estabrooks, D. N. 6081
 Estrada, E. 7200
 Etheridge, P. 4490
 Etherton, B. 5358
 Etten, H. D. Van 8688
 Etzel, W. W. 626
 Eüdakimava, G. A. 5344
 Evans, D. E. 4891, 8235, 9254
 Evans, F. J. 1448, 2357, 3075, 8019
 Evans, G. 442, 2230
 Evans, G. E. 316, 1328
 Evans, H. J. 8308
 Evans, L. S. 7711, 8682
 Evans, L. T. 5265, 7727
 Evans, R. J. 7724
 Evans, W. C. 1432, 3004, 3015
 Evdokimoff, V. 3050
 Evenari, M. 8426
 Evéquo, M. 1725
 Everett, P. H. 6071
 Evert, R. F. 7688
 Evola, C. 4802
 Evstigneeva, Z. G. 2061, 8723
 Ewusie, J. Y. 6271
 Exner, B. B. 9223
 Eynard, I. 1126, 1895, 5023
 Eyolfson, J. L. 8016
 Eysinga, J. P. N. L. R. van 5345
 Ezell, D. O. 2787
 Ezerzha, A. A. 1241
 Ezhov, V. N. 7595
 Faas, K. H. 5116, 8549
 Faccioli, F. 1846, 1847, 5063
 Faccioli, G. 1294, 3629, 3803, 6095
 Facsar, G. 6763
 Facticeau, T. J. 5767
 Fadda, G. S. 9244
 Fadi, M. S. 8756
 Fageria, N. K. 6250
 Fahmy, M. A. El-H. 789
 Fahn, A. 8009
 Fahy, P. C. 3828
 Fahy, P. G. 2905
 Fairman, L. S. 5142
 Fairbrothers, D. E. 4059
 Faithfull, E. M. 1984
 Faivre-Amiot, A. 762
 Falade, J. A. 4507, 7787
 Falcon, L. A. 1761
 Fald, M. S. 2842
 Fallot, J. 4278, 5044
 Faltynowicz, M. 5819
 Faluba, Z. 1679
 Falus, M. 5592
 Fang, T.-T. 6368
 Fanguy, H. P. 9234
 Fanjul, R. 8258
 Fankhauser, F. 1784, 1796, 6576
 Fantino, M. G. 6806
 FAO 863, 1672, 3297, 4046
 Faparusi, S. I. 2351
 Farag, M. A. 778
 Faria, V. P. de 5580
 Farley, J. D. 2874, 2876, 8765
 Farmer, A. 4245
 Farmer, W. J. 8055
 Farnsworth, N. R. 2343, 2344, 2346, 2347, 2360, 5532, 6291
 Farooqi, M. I. H. 4870
 Farr, E. 9, 5307
 Farrahi-Ashtiani, S. 1442
 Farrell, K. M. 2460
 Farrimond, A. 5089
 Fasih, S. 1619
 Faskhutdinov, Sh. 3310
 Fassbender, H. W. 6911
 Fast, G. 2273
 Fatali-Zade, F. A. 2534
 Fatemi, J. 2392
 Faulkner, R. 7035
 Faust, H. 5832, 5833
 Faust, M. 922, 1771, 4201, 4981, 6479
 Fauvel, M. 5348

- Favali, M. A. 1169, 1409, 1410
 Favaloro, M. 4803
 Favelli, F. 5381
 Favilli, F. 2701
 Favre-Bonvin, J. 9007
 Favretto, L. 5837
 Fawzi, A. F. A. 1122
 Fay, R. D. 557
 Favez, M. B. E. 350, 4777
 Fazalnoor, K. 1360
 Fazli, F. R. Y. 5537
 Feder, W. A. 1340, 3916, 4392, 6840
 Fedorchenko, G. P. 7110
 Fedorinchik, N. S. 8648
 Fedorov, M. 1791
 Fedorov, P. N. 2665
 Fedorov, V. 3310
 Fedorova, A. I. 2623
 Fedotov, I. M. 2595, 3430
 Feely, L. 1961
 Feiter, A. 478
 Fejer, S. O. 4174
 Feldman, A. W. 4796
 Feldman, S. 3696
 Feldmesser, J. 2265
 Fel'fandbein, P. S. 2527
 Felicetti, L. 657
 Fellay, D. 2583
 Fellenberg, G. 3721, 4500
 Fenster, C. R. 7702
 Feofilova, E. P. 7738
 Feofilova, G. F. 5438, 5439
 Ferauge, M. T. 4152
 Ferguson, A. C. 2131, 4134
 Ferguson, T. U. 1434
 Fernandes, N. G. 5563
 Fernandes, P. D. 2896, 4381, 5890, 5911, 7760
 Fernandez-Arias, H. 5246
 Fernández-Borrero, O. 9167
 Fernandez Caldas, E. 4041
 Fernandez, M. 1453
 Fernández, R., M. 8787
 Fernando, H. E. 8143
 Fernando, L. H. 9270
 Fernando, S. T. 8832
 Fernqvist, I. 2489, 2916
 Ferrante, G. M. 1580
 Ferrante, O. 4708
 Ferrari, F. 772
 Ferrari, J.-P. 2839
 Ferrari, J. P. 5319
 Ferraro, G. E. 777
 Ferré, J. 4065
 Ferree, D. C. 3387, 3389, 3396, 3408
 Ferreira, A. A. 5853
 Ferreira, J. J. 1024
 Ferreira, L. A. B. 9172
 Ferrer, M. M. de 3944
 Ferris, J. M. 243
 Fetvadzhieva, N. 6734
 Feucht, W. 4240, 5705, 8442, 8444
 Feuillat, M. 4360
 Fewkes, D. W. 9256
 Fick, G. W. 1675
 Fideghelli, C. 75, 1814, 1815, 3499, 3579, 3592
 Fiedler, W. 36, 37, 38, 916, 8359
 Field, R. J. 195
 Fieldgate, D. M. 7388
 Fierlinger, P. 4556
 Figueiredo, P., 5814
 Figier, J. 4642
 Figueiredo, I. B. 359
 Figueroa R., M. 8053
 Figurkin, B. A. 8023
 Filani, G. A. 3193
 Filby, R. H. 6293
 Filgueira, F. A. R. 2112
 Filinova, N. P. 5106
 Filippov, L. A. 913, 4979, 8267
 Filippova, G. G. 3806
 Filizi, N. 482, 1023, 6583
 Fimiani, P. 6377
 Finch, S. 8625
 Finn, R. F. 99
 Finnegan, R. A. 4909, 4910
 Finney, D. J. 3295
 Fiore, M. 5231
 Fiorino, P. 83, 505, 1013, 1015, 2423, 2425, 4246, 4247
 Firichenkov, S. T. 8348, 8366
 Firman, I. D. 1540, 2451
 Firn, R. D. 3719, 4514
 Fischer, B. 1949, 8614
 Fischer, B. B. 452
 Fischer, H. 85
 Fischer, P. 8847
 Fischer, R. A. 5998, 8711
 Fisenko, V. Yu. 8508
 Fish, F. 2361
 Fisher, J. B. 4511
 Fisher, J. R. 5087
 Fisher, M. A. W. 4918
 Fisher, N. M. 7646
 Fisher, R. W. 7580
 Fishman, G. M. 7151
 Fiskell, J. G. A. 3683
 Fitch, L. B. 524
 Fitz, D. B. 9076
 Fitzgerald, R. D. 3912
 Fiveland, T. J. 3731, 3821
 Flachsbart, E. 2212
 Flaherty, B. 2505, 3331
 Flaherty, D. 1920
 Flanzky, M. 3601
 Flechtman, C. H. W. 4065
 Fleeker, J. R. 7500
 Flegg, P. B. 4598, 6957
 Fleisher, A. Yu. 2322
 Flémal, J. 3261
 Flemer, W. 6211
 Flemer, W., III. 2978
 Fleming, A. L. 5974
 Fleming, G. A. 8308
 Fleming, J. W. 595, 1221, 4355, 5993
 Flentje, N. T. 3184
 Fletcher, A. J. 5225
 Fletcher, J. S. 2298, 8955
 Fletcher, J. T. 1967, 5400, 5409, 7835
 Fløistad, J. 3759
 Flom, M. S. 5468
 Flood, A. E. 3959, 7623
 Flores Caceres, S. 6440
 Flores F., A. 5794
 Flores, I. 5794
 Flores, M. C. 3174
 Flores, S. 9258
 Fluck, R. C. 6052, 9103
 Fock, H. 2915
 Fodor, B. 7014
 Fogel, V. A. 3029
 Fogle, H. W. 515
 Fogliani, G. 5853
 Fogliata, F. A. 6436
 Fogksha, M. G. 1094
 Földen, D. 6315
 Folk, G. 7046
 Folley, R. R. W. 2486, 8349
 Folwell, R. J. 5144
 Fomenko, K. P. 782
 Fomenko, L. S. 5700
 Fomenko, O. A. 4963
 Fomin, E. M. 2918
 Fomin, P. I. 6079
 Fomina, O. G. 6079
 Fong, H. H. S. 2343, 2344, 2347, 5532
 Fomesbech, M. 6205, 6206
 Fonseca, H. 2037, 2038, 8159
 Fonseca, J. P. da 6351
 Fontana, A. 7435
 Fontanazza, G. 7436
 Fontes, M. R. 6800
 Foote, M. 7721
 Forche, E. 8442
 Ford, E. J. 3316
 Ford, H. W. 9081
 Ford, T. W. 163
 Forde, St. C. M. 4071
 Fordham, A. J. 6134, 7040
 Fordham, R. 8264
 Fordyce, C., Jr. 4603
 Forer, L. B. 2929
 Forest, J. C. 196, 2029
 Forkmann, G. 6997
 Fornel, S. M. 4190
 Forostyan, Yu. N. 1923
 Forrence, L. E. 222, 448
 Forrest, J. E. 7975
 Fors, A. L. 4105
 Forsberg, J. L. 2241, 5423
 Forshey, C. G. 488, 1785, 5769, 8363
 Forster, H. 7788
 Forsyth, F. R. 3529, 5695, 6688
 Forsyth, J. B. 5553, 5798
 Forsythe, H. Y., Jr. 4289, 8499
 Fort, G. 5839
 Fortanier, E. J. 7912
 Fortes, J. M. 1613, 4074
 Fortusini, A. 1117, 5853
 Foschi, S. 5734, 6820
 Foster, H. L. 8289
 Foti, S. 679, 2159, 5159
 Fouly, M. M. El 1122
 Founk, J. 3777
 Fountain, D. W. 3644
 Fouqué, A. 377, 822, 1523, 2434, 4117, 5597, 5598, 5646, 9122, 9123, 9124
 Fournet, A. 1428
 Fournet, J. 1289, 4548, 5329, 6051, 7823
 Fouse, D. C. 4806
 Fowden, L. 1702, 6236, 7693
 Fowler, M. W. 7741
 Fox, C. J. S. 7657
 Fox, R. D. 872
 Fox, R. L. 7629
 Foxton, G. 4982
 Foy, C. D. 5974
 Foy, C. L. 3, 123
 Foyet, M. 843, 3982
 Frä, A. Dal 6806
 Fracassini, D. S. 5175
 Fraer, M. Sh. 883
 Fraeyhoven, F. H. 1674
 France, Institut de Recherches Agronomiques Tropicales et des Cultures Vivrières 754, 3605, 5647
 France, Institut de Recherches sur le Caoutchouc en Afrique 3250, 9205
 France, Institut National de la Recherche Agronomique 9109
 Franceschetti, U. 7868
 Franchuk, E. P. 2564, 2674, 2698
 Francia, E. 5703
 Franciosi T. R. 1500
 Francis, F. J. 1865, 8958
 Francis, H. 5497
 Francis, H. L. 3989, 5564
 Francis, M. J. O. 3036, 4747
 Franck de Soldi, C. L. 5596
 Francki, R. I. B. 420, 421
 Franco, C. M. 8671
 Franco F., H. 5651
 Francois, L. E. 2161
 Frank, J. H. 8243
 Frank, J. R. 8
 Frank, R. 1173
 Franke, W. W. 2951
 Frankel, R. 7870
 Frankel, R. 8872
 Franken, A. A. 5886
 Franklin, E. W. 1801, 3813
 Franz, C. 4743, 6263
 Franz, G. 7098
 Franz, J. M. 4930
 Franz, W. 693, 5393, 8047
 Frappell, B. D. 6878
 Fraser, D. E. 1219
 Fredericq, H. 5687
 Fredon, J.-J. 8639
 Freeman, G. G. 1989, 3934
 Freeman, G. H. 8287
 Freeman, J. A. 8500
 Freeman, K. C. 4091
 Freeman, L. K. 2171
 Freeman, R. N. 2185
 Fregoni, M. 558, 4337, 5046
 Freidrich, H. 9027
 Freire, R. 308
 Freitas, L. M. M. De 1573
 Frémond, Y. 9147
 French, N. 4710, 8954
 French West Indies, Institut National de la Recherche Agronomique 5668
 Frenhani, A. A. 4532
 Frenkel, C. 88, 7462
 Frenz, F.-W. 1162
 Fretz, T. A. 439, 2171, 2986, 3305, 4614, 4693, 8297, 8853
 Frey, G. 6009
 Frey, L. 8913
 Freyrier, M. 7357
 Freyre, R. H. 1422
 Fric, J. 6281
 Fric, V. 1420, 1421, 6280
 Frick, E. L. 2576
 Fridmann, M. 2453
 Fridrich, J. 43
 Fridrich, J. H. 5769
 Friedrich, A. 47
 Friedrich, G. 900
 Friedrich, H. 6290
 Friend, J. 7981
 Frihart, C. R. 219
 Friis-Nielsen, B. 6479
 Frish, E. V. 3526
 Fritsche, G. 261
 Fritzsche, G. 8846
 Fröhlich, H. 1987, 5889
 Frowd, J. A. 3940, 3941
 Fry, P. R. 4453, 7474, 7631
 Frydrych, J. 4422
 Fryer, J. D. 7277
 Fuchs, A. 4912
 Fuchs, T. W. 7669
 Fuchs, Y. 1703, 2069
 Fudl-Allah, A. E. A. 2391
 Führer, H. 3076
 Fujii, S. 6022
 Fujii, T. 3567
 Fujimoto, Y. 1698, 2704, 2851, 3329
 Fujimura, T. 5425
 Fujino, M. 5425
 Fujiwara, A. 5933
 Fukai, N. 8071
 Fukatsu, R. 1999
 Fukuda, M. 5288, 7744
 Fukui, H. 7157, 8093, 9084, 9085
 Fukunaga, E. T. 5588
 Fukushima, H. 3160
 Fuleki, T. 5877
 Fuller, G. L. 194, 3693
 Fuller, W. A. 694
 Fullilove, H. M. 4542
 Fulton, J. P. 2020
 Funaba, M. 6826
 Fundación Shell 107, 228, 1253, 5298, 6807, 6921, 7187, 7203
 Funk, D. T. 5067
 Furber, M. J. 2757
 Furness, W. 6029
 Furon, V. 1591
 Fursa, T. B. 4461
 Furukawa, H. 6282
 Furukawa, J. 8938
 Furundžić, M. 6588, 7317
 Furuta, T. 1326, 3007, 7847
 Furuya, T. 4766, 5529
 Futral, J. G. 4542
 Fuzita, M. 7419
 G., W. J. 3269
 Gaalen, H. J. van 6965
 Gaard, G. 5281
 Gastra, P. 2498
 Gabai, M. 3095
 Gabbrielli, R. 5726
 Gabelman, W. H. 2138, 2142, 5902
 Gabrichidze, S. Sh. 2982
 Gabrichidze, Z. Sh. 7959
 Gabrielli, L. F. 5837
 Gabriels, R. 6167
 Gabrielson, R. L. 4709, 7656
 Gadallah, A. I. 1008, 3455
 Gadella, T. W. J. 7880
 Gadgil, V. N. 726
 Gadzhieva, I. Kh. 1320
 Gadzhonov, I. 692, 1186, 7814

- Gadzhonova, P. 4417
 Gafarov, B. Kh. 6062
 Gafurova, V. L. 1768, 8396
 Gaggelli, D. 5396
 Gagnard, J. 2640
 Gaidamak, V. M. 6924
 Gaillard, J. P. 1608
 Gaid, K. N. 7934
 Gaines, T. P. 6067
 Galbraith, M. N. 8036
 Galil, J. 1811, 2636
 Galindo, J. 4531
 Gallagher, J. E. 6778, 8914
 Gallagher, P. A. 5389, 6937, 7783, 7785
 Gallander, J. F. 4335
 Gallego M., F. L. 73
 Galletta, G. J. 1065
 Galli, F. 5563
 Gal'per-Blichenko, E. M. 1902
 Galston, A. W. 2058, 6235
 Galun, E. 2201
 Galuszka, E. 2908
 Galvão, J. D. 1208
 Galyaeva, N. N. 7110
 Gamassy, A. M. El 2167, 2168
 Gamayunova, M. S. 1240
 Gambi, O. V. 5726
 Gamburg, O. L. 1306, 4590
 Gambrell, C. E., Jr. 1830, 5775
 Gambrell, R. G. 4309
 Gámez, R. 6845
 Gamkrelidze, G. L. 3278
 Gammeren, J. van 8406
 Gancheva, I. 7538
 Gandy, D. G. 8825
 Ganeva, D. 3730
 Ganguly, S. N. 1053, 3011, 8032
 Ganguly, T. 3011
 Gangwar, B. M. 8463
 Ganje, T. J. 440
 Ganney, G. W. 702
 Ganry, J. 6386
 Gapiński, M. 676, 700, 701
 Gapp, S. 7074
 Gaprindashvili, G. V. 560
 Garan'ko, I. B. 4552
 Garber, K. 865
 Garber, M. J. 6912
 Garbuzova, V. M. 8018
 García, B., J. 4047
 García Espinosa, R. 3249
 García-Estrada, M. G. 308
 García, G. 8647
 García, J. G. L. 3679, 3699, 3700
 García-Jalon, I. 1453
 García R., F. 5649
 García Reyes, F. 5649
 García, V. 4041
 Gardan, L. 5040
 Gardner, B. R. 4452
 Gardner, W. R. 1181, 2790, 3713
 Garg, I. D. 3684
 Garg, O. P. 671
 Garg, R. C. 7758
 Garibaldi, A. 2221, 4538, 4619
 Garifullin, A. 3310
 Garman, C. F. 978
 Garmi, I. 5058
 Garnier, J. 7102
 Garnsey, S. M. 3125
 Garofalo, F. 4739, 6610
 Garrard, L. A. 1647
 Garretsen, F. 8744
 Garrido, J. 1904
 Gärtel, W. 5134, 5853
 Gartner, J. B. 1321, 2276
 Garunov, G. G. 1758
 Garza Falcón, G. 5794
 Garzoli, K. 879
 Gasanov, Z. M. 2431
 Gascho, G. J. 4088
 Gascon, J.-P. 8164
 Gašparíková, O. 3749
 Gasparyan, O. B. 5487
 Gasperetti, L. 4980
 Gassman, M. L. 7714
 Gasyuk, A. N. 1048
 Gates, J. E. 7381
 Gates, L. F. 3789
 Gathercole, F. J. 74, 3459, 4253
 Gatica, J. C. 4258
 Gaur, S. K. S. 3691
 Gauss, J. F. 2864
 Gautham, R. C. 206
 Gautheret, R. 8597
 Gautier, M. 456, 2638
 Gava, A. J. 4585
 Gavalas, N. A. 864
 Gavarra, M. R. 2437
 Gavrilov, G. P. 5112, 6736
 Gavrilov, K. I. 6305
 Gavrilova, L. 8533
 Gavrilović, M. 2522, 3377, 3505
 Gavrilović, M. D. 3382
 Gawaad, A. A. A. 201
 Gawad, M. M. A. 3023
 Gay, A. P. 4920
 Gay, G. 1126
 Gay, J. D. 2791
 Gayler, K. R. 1644, 1645, 2475, 6448
 Gazit, S. 2378, 3093, 5594
 Gazzar, A. M. El 1477
 Gee, G. W. 8755
 Gee, H. 4676
 Geenen, J. E. E. 6577
 Gegechkori, M. T. 1167
 Geier, P. W. 2501
 Geiger, D. R. 5987
 Geiselman, C. W. 6320
 Geisenberg, C. 6708
 Geisman, J. R. 1699
 Geissler, T. 119, 5950
 Geissman, T. A. 2825, 6286
 Geldermalsen, M. van 4990
 Gel'fandbein, P. S. 2588
 Gellert, E. 3017
 Gellért, K. 6059
 Gellért, M. 9038
 Gellini, R. 5592
 Gelmond, H. 3645, 3677
 Gemidzhiev, G. 688
 Genchev, S. 8738
 Gendraud, M. 2749
 Gendy, S. A. El 2167
 Gendy, S. A. El 2168
 Geneidi, G. S. 4384
 Gener, P. 7228
 Genest, K. 9025
 Genge, S. 8699
 Genin, S. A. 7066
 Genkel', P. A. 2802
 Genkov, G. 6793, 6794
 Genkova, M. 2024
 Gentile, I. A. 6084
 Genty, P. 9189
 Georgala, M. B. 3136, 4003
 George, L. 9022
 George, W. L., Jr. 5970
 Georgescu, M. 8538
 Georgiev, D. 5960
 Georgiev, G. H. 2067, 3750
 Georgiev, G. Kh. 2067
 Georgiev, G. N. 4311
 Georgiev, S. 2337
 Georgiev, V. 5772
 Georgieva, M. 1171, 6793, 6794
 Georgieva, M. K. 7780
 Georgieva, N. 257
 Georgieva, R. 257
 Georgieva, V. 3800
 Georgieva, Y. D. 7692
 Georgobiani, E. L. 6750
 Geraci, G. 817
 Geraldson, C. M. 4570, 6479, 8860
 Gerasimenko, I. I. 1454
 Geraskina, G. V. 2897
 Gerber, B. 1919
 Gerdemann, J. W. 7132
 Gerds, M. 1812
 Gerginova, Ts. 8386, 8387
 Gerin, G. 481
 Gerlach, W. 2267, 8047
 Gerloff, G. C. 1181, 2790, 5974
 German Federal Republic, Biologische Bundesanstalt für Land- und Forstwirtschaft in Berlin und Braunschweig 4298, 6504, 7063, 7599, 8837
 German Federal Republic, Bundesanstalt für Qualitätsforschung Pflanzlicher Erzeugnisse, Geisenheim/Rheingau 8284
 German Federal Republic, Deutscher Pflanzenschutzdienst 6506, 6669, 7064, 8579
 German Federal Republic, Fachhochschule Weihenstephan 7310, 7600, 7844
 German Federal republic, Hessische Forschungsanstalt für Wein-, Obst- und Gartenbau Geisenheim (Rheingau) 8315
 German Federal Republic, Institut für Angewandte Botanik der Universität Hamburg 5094, 6481, 6505, 6959, 7070, 7597
 German Federal Republic, Landespflanzenschutzdienst Rheinland-Pfalz 7309, 7598, 7843, 7964, 8481
 German Federal Republic, Staatliche Lehr- und Versuchsanstalt für Wein und Obstbau, Weinsberg 4943
 German Federal Republic, Staatliche Lehr- und Versuchsanstalt für Wein- und Obstbau, Weinsberg 5072
 Germanier, R. 2614
 Germing, G. H. 1974, 3314
 Gerrits, J. P. G. 3827, 4599, 6123, 6952
 Gersbach, K. 5784
 Gerson, U. 1490, 3983
 Gertman, E. 2069
 Gesheva, R. 5799
 Getzenaner, M. E. 1770
 Getzin, L. W. 1255
 Geyer, W. A. 4924
 Geypens, M. 6920, 8791
 Ghai, G. 3210
 Ghaleb, H. 3023
 Ghana, Cocoa Research Institute 7177
 Ghandour, M. A. El 2842, 8756
 Ghani, A. 1432
 Gharbo, S. A. 6320
 Ghatak, J. 6271
 Ghena, N. 7342
 Gheorghita, M. 7549
 Gheorghiu, E. 8474
 Gherghi, A. 5706, 7373, 8413, 8471
 Ghose, S. K. 5026
 Ghosh, B. 3219
 Ghosh, B. N. 22, 1589, 4865
 Ghosh, J. J. 3208, 8128
 Ghosh, N. C. 8013
 Ghosh, S. K. 889, 7086
 Ghosh, S. P. 4991
 Ghung, H. J. 1308
 Giacomelli, M. 8713
 Giannattasio, M. 8598
 Giannotti, J. 17
 Gianotti, J. 6608
 Giaquinta, R. 5987
 Giardini, L. 5939
 Gibbon, J. M. 4385
 Gibbs, M. 3740, 8724
 Gibbs, M. M. 480
 Gibeault, V. A. 7916
 Gibson, M. R. 3969, 6293
 Gibson, R. A. 250, 251, 2127
 Giddens, J. 1821
 Giessen, A. C. van der 3325
 Gigliotti, A. 5878
 Gil, G. F. 4280, 4357, 8469, 8470
 Gilberston, R. L. 6202
 Gilbert, J. 757
 Gilbert, R. I. 7872
 Gilbertson, G. 8989
 Gilder, J. 7691
 Gilfillan, E. C. 410
 Gilfillan, I. M. 1502
 Gilford, J. McD. 8906
 Gililov, B. Kh. 2535
 Giliomee, J. H. 4950, 7394
 Gill, D. L. 751, 2205, 5412, 6240
 Gill, H. S. 416, 3656, 5977, 6808, 9233
 Gill, J. L. 6018
 Gill, L. S. 1318, 1319, 1413
 Gillard, A. 4581
 Gilles G. 6698
 Gillham, E. M. 4929
 Gilman, K. F. 2997
 Gilmartin, A. J. 6199
 Gilmer, R. M. 470, 962, 5853, 5854
 Gilpatrick, J. D. 43, 92, 8475
 Gindich, N. N. 3972
 Ginn, C. R. 3846
 Ginoux, G. 3554, 5348
 Ginoux, J. P. 6836
 Gins, V. K. 3689
 Ginsburg, L. 5008, 5145
 Ginsburg, S. Ya. 7559
 Ginterová, A. 8830
 Ginzburg, C. 6174
 Giorgadze, R. G. 364
 Girard, M. 9109
 Girenko, M. M. 1941, 4401
 Girling, D. J. 8240
 Girolami, L. 4346
 Giroto, G. 6901
 Gisvold, O. 3074
 Gitsba, D. K. 5523
 Giudice, P. M. Del 2036
 Giudice, V. Lo 4792, 5552, 8092
 Giudici de Nicola, M. 6994
 Giuliani, G. 1806
 Giulini, p. 320
 Giunchedi, L. 3944
 Giurea, M. 7373, 8413
 Giustina, W. della 3627
 Gladyshev, A. I. 7108
 Glasgow, S. K. 1007
 Glassman, S. F. 3979
 Glasziou, K. T. 1644, 1645, 2475, 6448, 8191
 Glaze, N. C. 6067, 6904
 Glazurina, A. N. 737
 Glendinning, D. R. 2445
 Glenn, W. K., Jr. 2995
 Glennie, C. W. 2331
 Gleya, J. 8027
 Gliha, R. 7457
 Glits, M. 7046
 Globerson, D. 3677
 Glonti, Ts. F. 7159
 Glória, N. A. da 3260
 Glória, N. A. de 7287
 Glover, J. 404, 7261
 Glushchenko, E. Ya. 2891
 Naegi, F. 1115
 Goad, L. J. 4042
 Goas, G. 7739
 Goasquen, J. 6777
 Goble, H. W. 1173
 Gochbauer, C. 5991
 Goddrie, P. D. 6529, 6530
 Godefroy, J. 5551
 Godfrey-Sam-Aggrey, W. 362
 Godin, V. J. 355
 Godoy H., D. 3471
 Godoy Junior, C. 3196
 Godoy Júnior, C. 9162
 Goedegebeure, J. 7331
 Goedheer, J. C. 1673
 Goepel, C. 7104
 Goethals, M. 2920
 Goetze, N. R. 7916
 Gogoi, S. C. 6456
 Goh, C. J. 6210
 Goheen, A. C. 5853
 Gohr, H. 5950

- Golan, J. 3583
 Golato, C. 2143
 Gold, A. H. 1294, 3803, 6095
 Goldberg, D. 3624, 4376, 4448, 4537, 6891
 Goldblatt, P. 6182
 Golden, A. M. 2265
 Golden, L. E. 9247
 Goldenberg, J. B. 3852
 Goldschmidt, E. E. 2399
 Goldschmidt-Reischel, E. 4305, 8368
 Goldstein, L. D. 6020
 Goldwasser, E. 3784
 Goldyban, N. P. 8794
 Goliadze, Sh. K. 3129, 4801, 7144, 8060, 9078
 Goliás, J. 7636, 8428
 Golinka, P. I. 5121
 Goliš, A. 8433
 Gollifer, D. E. 7076
 Golodriga, P. Ya. 6723, 6726
 Golomb, A. 3993
 Golovanov, I. S. 2513
 Goltz, S. M. 1250
 Golubinskaya, N. S. 7957
 Golyshkin, L. V. 8933
 Gomma, N. 6470
 Gomes, F. P. 1573
 Gomes, F. R. 1613, 3697
 Gomez-Alvarez, F. 8214
 Gómez, E. 4357
 Gomez, J. B. 6420
 Gómez P., J. F. 5651
 Gomez, R. E. 8054
 Gommers, F. J. 283
 Gonçalves, J. R. C. 8181
 Gonchar, A. F. 581
 Gonzales, C. S. 2437
 González, A. G. 308, 8000
 Gonzalez, C. 6554
 González González, A. 8000
 González, J. 4055
 González, J. A. 8690
 González, J. T. 6729
 Gonzalez, O. N. 4527
 Gonzalez, R. H. 5041
 González, S. 7303
 González Soto, G. 5635
 Gonzalez, U., L. C. 5620
 Goo, T. 4878, 6158, 6418
 Good, G. E. 4021
 Good, J. M. 7771
 Goodale, J. H. 6334, 8099
 Goodenough, P. W. 7798
 Gooding, H. J. 7520
 Goodman, N. 3762
 Goodwin, P. B. 4332
 Goodwin, T. W. 4042
 Goos, U. 1027
 Gopal, H. 1438
 Gopal, N. H. 8158
 Gopal, P. P. S. 7083
 Gopalan, M. 838
 Gopinath, K. W. 3030
 Goplen, S. P. 8294
 Gorban', I. S. 5457
 Gorbanov, S. 7630
 Gorbunov, A. B. 2690
 Gordon, A. 4332
 Gordon, A. W. 8248
 Gordon, E. I. 5488
 Gordon, M. 7763
 Gordonov, M. D. 1730
 Goren, R. 368, 4014, 4807, 7149, 7150, 8083
 Görgen, W. 3600
 Gorini, F. 3499, 4980
 Gorini, F. L. 2600
 Gorkavlenko, E. B. 1921
 Gorlanov, N. A. 3711
 Gormley, R. 6601, 6602
 Gormley, T. R. 2900, 6937, 7818
 Gorter, G. J. M. A. 6821
 Gosen, O. 5126, 6730
 Gosnell, J. M. 412, 7262, 8199, 8209
 Goss, R. L. 4671
 Goswami, A. M. 8321
 Gotan, S. M. 7451
 Goto, M. 2083, 5561
 Goto, Y. 6453
 Gough, R. E. 6524, 8419
 Gould, W. A. 2785, 2862
 Gourley, C. O. 242
 Gourret, J. P. 5246
 Govers, A. 5228
 Govindachari, T. R. 3076
 Govindaswamy, C. V. 1189
 Govindu, H. C. 8017
 Gowans, K. 8913
 Gowda, B. K. L. 8215
 Gowder, R. B. 9106
 Gozin, A. A. 1869, 6189, 6246
 Graaf, R. De 1293
 Graaff, F. de 5428
 Graaff, J. de 5427
 Gracia, O. 5347
 Graciani Constante, E. 2427
 Gracz-Nalepka, M. 8774
 Graff, O. 5847
 Graham, A. E. 7039
 Graham-Bryce, I. J. 4490
 Graham, D. 5895, 5896
 Graham, H. D. 1596
 Graham, H. N. 1665
 Graifenberg, A. 4624
 Grainger, V. F. 7641
 Graman, J. 5268
 Grambow, H. J. 1306
 Gramolina, T. M. 8645
 Gramond, J. P. 8102
 Gran, L. 8033
 Grandi, R. 3064
 Graner, E. A. 9162
 Granett, A. L. 1226, 6860
 Granges, J. 2529
 Granhall, I. 2916
 Graniti, A. 4478, 4487, 4928
 Grant, M. S. 6463
 Grant, W. F. 1346
 Grasselley, C. 1817
 Grassi, C. J. 7358
 Grassi, G. 3579
 Grassia, A. 5005, 8796
 Grasso, S. 797
 Grau, I. 3853, 7639
 Grauslund, J. 1776, 3360, 3423, 8403
 Gray, J. C. 2030, 8700
 Grazen, A. M. 4518
 Graziano, M. N. 777
 Greathouse, D. C. 8137
 Greaves, M. P. 4938
 Grebinskiĭ, S. O. 154
 Grecu, V. 7556
 Greff, J. A. De 3716, 7715
 Greeley, L. W. 1874
 Green, A. H. 4876
 Green, G. F. 1504
 Green, J. A. 8341
 Green, J. H. 2089, 3761, 5166, 5371
 Green, R. J., Jr. 243
 Green, T. R. 5280, 8790
 Green, V. E., Jr. 4830
 Greenberg, S. 7459
 Greene, D. W. 976, 3495
 Greene, G. L. 4465
 Greenham, D. W. P. 866, 4121
 Greenway, H. 7805
 Greenwood, D. J. 2739, 4121
 Gregorini, G. 139, 717
 Gregory, L. E. 2801
 Gregory, P. 5986
 Gregory, P. H. 386
 Greidanus, T. 1062
 Greig, J. K. 2091, 5903
 Grellet, F. 8641
 Greppin, H. 129
 Gressel, J. 2201
 Gresshoff, P. M. 4582
 Gretzmacher, R. 6796, 8618
 Grevtseva, E. I. 5699
 Grewal, M. S. 6242
 Greyson, R. I. 1300, 2884, 3816
 Gribanovskii, A. P. 4194
 Grice, E. B. Le 5470
 Grice, W. J. 5660
 Grieg, J. K. 4924
 Grierson, W. 1505, 2409, 4015, 4017, 8098
 Griffin, M. J. 5409
 Griffith, G. R. 3028
 Griffiths, E. 836, 3201
 Griggs, W. H. 4280, 7439, 8469, 8470
 Grigorov, S. P. 5079
 Grill, F. 438
 Grill, R. 4937
 Grimm, G. R. 6348
 Grinblat, U. 3103
 Grinenko, V. V. 5700, 5701, 6727, 8508
 Grishanovich, A. K. 5817
 Grishin, M. A. 6364
 Grisse, A. De 7800
 Grisse, A. T. De 4581
 Gritsishin, I. S. 8488
 Grittner, I. 8441
 Gritton, E. T. 2047, 4501
 Grivell, C. J. 421
 Grizebakh, G. 3282
 G"rnevski, V. 4255, 6649
 Groce, J. W. 9024
 Grodzinskiĭ, D. M. 6097
 Groen, N. P. A. 7899
 Groenewegen, A. N. 2735
 Groenewegen, C. A. M. 749, 2156, 2197, 2226, 7292
 Grohmann, A. A. 4473
 Grolleau, J. 2640
 Gromova, L. I. 6305
 Gromová, Z. 1262, 1263
 Grosclaude, C. 93, 6659, 8476
 Grošeta, T. 6490
 Gross, D. 2308, 8248
 Gross, J. 3095
 Grossman, R. 6619
 Grossmann, F. 865, 7796
 Groven, I. 3518, 3523
 Grover, R. K. 4573, 6106
 Groza, T. 7360
 Grozov, D. N. 5724
 Gruber, P. J. 4480
 Grübner, P. 8826
 Grudev, E. S. 5340
 Grunwald, C. 6828
 Gruppe, W. 7427, 8431, 8444
 Grylls, N. E. 6846
 Gryuner, A. M. 4187
 Guadagni, D. G. 5368
 Guadalupe, R. 1538
 Guantes, M. M. 7748
 Guardiola, J. L. 215
 Guariento, M. 2781, 5373
 Guazzelli, R. J. 8671
 Gubbels, G. H. 2895, 5186
 Gubko, V. A. 6736
 Gudauskas, R. T. 5449
 Gudsteinsson, K. 5428
 Guédez A., M. A. H. 8173
 Guédez, H. J. 8141
 Guédez, M. A. H. J. 7992
 Gueldner, R. C. 2306
 Guelfat-Reich, S. 8572
 Guénin, G. 1605, 9185
 Guenther, E. 8989
 Guérout, R. 826, 1612, 6387
 Guerra, D. 780
 Guerrier, D. 8926
 Guerriero, R. 6376
 Guez, M. 182
 Gugenhan 2218, 2282, 6143
 Guha, M. M. 5643
 Guignard, E. 2583
 Guillaumein, J.-J. 823
 Guillot, A. 3812
 Guittou, Y. 8641
 Gullino, G. 2221
 Gumbardize, N. P. 7484
 Gumińska, Z. 8774
 Gumpf, D. J. 1168, 4635
 Gunasekaran, C. R. 1279
 Gunasekaran, M. 2616
 Gunasena, H. P. M. 5257
 Gunn, E. 8375
 Gunning, B. E. S. 1673
 Gunzenhauser, E. 742
 Gupta, B. D. 2754
 Gupta, B. M. 3665
 Gupta, B. P. 3476
 Gupta, D. D. 9082
 Gupta, D. N. 9228
 Gupta, M. L. 7807
 Gupta, M. N. 5471
 Gupta, M. P. 3969, 6293
 Gupta, N. K. 3030
 Gupta, O. P. 8091
 Gupta, P. C. 1426, 3070, 9028, 9029
 Gupta, P. N. 2525, 8321
 Gupta, R. 767, 3039, 5500, 6322, 8994
 Gupta, R. K. 1438
 Gupta, R. L. 7934
 Gupta, S. 726, 8010
 Gupta, S. C. 3783
 Gupta, S. K. 1416, 1489, 8232, 8233, 9033
 Gupta, S. R. 526
 Gupta, U. S. 2740
 Gupta, V. K. 7706
 Gupta, V. P. 235
 Gur, A. 2553, 6479
 Gur, I. 4653
 Gurabanidze, M. N. 3275, 9275
 Gurevitz, E. 94
 Guseinov, B. A. 1982
 Gushchin, M. F. 973
 Gushchin, M. Yu. 4961
 Gus'kova, I. N. 6283, 8988
 Gusser, H. 7784
 Gustafson, C. D. 2376
 Gutfinger, T. 8424
 Guthrie, F. E. 2501
 Gutierrez, A. 781
 Gutiérrez, J. 5623
 Gutierrez, L. E. 8159
 Gutiérrez Villalta, D. 6055
 Guttormsen, G. 884, 885, 2738, 4410
 Guttridge, C. 4329
 Guyana, Sugar Experiment Station 9220
 Guzman, V. L. 5942
 Gvamichava, N. E. 7717
 Gvasaliya, V. P. 3284, 8263, 8267
 Gvozdeva, Z. V. 1206
 Gwiazdzinska, S. 3061
 Gwynn, D. 5180
 Győr, J. 7293
 Gyúró, F. 1737
 Gyuró, F. 4198
 Haag, H. P. 394, 1983, 2082, 2238, 2896, 3197, 3200, 4381, 5890, 5911, 6109, 7192, 7760
 Haan, W. G. de 6137
 Haapala, E. 7665
 Haard, N. F. 1031, 3497, 6389, 7463
 Haas, J. H. 7707
 Haasbroeck, F. J. 8417
 Habbén, J. 8814
 Haber, Z. 5428
 Habermann 6138
 Habib, A. 799, 3134
 Habib, A.-A. 1514
 Habib, A.-A. M. 778
 Habib, A. T. 8259
 Habicht, G. 7989
 Habjörg, A. 2916
 Habjörg, A. 3885
 Hackett, W. P. 4610, 4685, 6217
 Hackland, B. A. 1468
 Hackler, L. R. 5978
 Hadačova, V. 5266
 Hadačová, V. 5999
 Haddad G., O. 8053
 Hadfield, W. 9271
 Hadley, G. 5459
 Haeder, H. E. 1295, 8308
 Haeger, J. S. 5541
 Haenchen, E. 2299
 Häfliger, E. 6491
 Hagan, R. M. 2424, 2630, 4239, 6355
 Hagedorn, D. J. 7729
 Hagel, G. T. 1216
 Hagemann, R. 5407
 Hagen, A. F. 3709
 Hagen, C. W., Jr. 284
 Hagen, L. J. 11
 Haggag, M. Y. 4756, 7099, 8006

Hagihara, H. H. 4093

Haginuma, S. 5002

Haglund, W. A. 6862

Hagood, M. A. 3309

Hague, N. G. M. 2484

Hahlbrock, K. 4732, 8983

Hahn, D. 6395

Hahn, M. 1964

Haid, F. 7090

Haigh, W. G. 3333

Hakkaart, F. A. 3873

Halás, L. 7060

Hale, C. N. 8686

Hale, M. G. 3

Hale, R. L. 5929

Halevy, A. H. 1199, 1324, 2239, 2297, 3688, 3920, 3922

Halevy, A. H. 4631

Halevy, A. H. 4653, 4655, 5227, 5326, 7949, 8888, 8889, 8890

Haliburton, T. H. 7657

Halim, A. F. 9003

Hall, B. J. 5682

Hall, C. 4445

Hall, C. B. 2848, 5916

Hall, E. G. 518, 1503, 1800, 1916, 4016, 4812

Hall, F. R. 3408, 4214, 4289

Hall, I. V. 105, 534, 2689, 3529, 3532, 6685, 6688, 8498

Hall, J. L. 5282

Hall, M. O. 1202

Hall, R. 3325

Hall, T. C. 4484

Hallama, G. 8404

Halliwell, B. 5174

Halperin, W. 3631

Halsey, D. D. 6341

Halsey, L. H. 6060

Ham, P. J. 7955

Hamada, K. 5425

Hamdorf, G. 4949

Hamdy, M. K. 9179, 9180

Hamed, M. G. E. 1122

Hameed, K. M. 2207

Hamid, B. H. 4875

Hamilton, R. A. 1606, 4821, 5585, 5588

Hamilton, R. I. 175

Hamilton, W. D. 1323

Hammad, S. M. 630, 5905, 7147

Hammer, O. 3930

Hammer, P. A. 4129

Hammerton, J. L. 1946, 1947

Hammett, H. L. 646

Hammett, L. K. 4319, 6690

Hammouda, F. M. 3023

Hamon, N. W. 3946, 8016

Hamori, J. 6585

Hampton, R. O. 1673

Hamuy, Y. 4460, 6827

Han, D. S. 5518

Han, E. D. 475

Han, K. P. 821

Hanada, K. 6815

Hanan, J. J. 1688, 4621, 5401, 8304

Hanaoka, M. 2435, 2461

Hance, R. J. 1051

Hancock, J. G. 2774

Hand, D. W. 3296, 7296

Handel, E. Van 5541

Handreck, K. A. 3173, 8167

Handro, W. 7871

Handy, M. F. 2383, 2393, 6342, 6343, 8069

Hanna, M. A. 980

Hannan, A. M. S. 7035

Hanny, B. W. 2306

Hanover, J. W. 2983

Hanras, J. 6698

Hans, A. S. 1378

Hansen, A. P. 4049, 9144

Hansen, C. W. 5541

Hansen, E. N. 8867

Hansen, G. L. 7995

Hansen, H. 6479

Hansen, M. 2489

Hansen, P. 2489, 3414, 5745, 6553, 8403

Hanson, A. D. 259, 260

Hanson, K. R. 1673

Hansson, G. 8308

Hanzliková, A. 189

Haq, F. 7344

Haque, I. 4423

Hara, M. 3005

Hara, T. 4116

Harada, H. 7871

Harada, T. 2080, 4578, 8735

Harakal, S. 3436

Harata, J. 7410, 7411, 7412

Harborne, J. B. 2331, 8634

Hardcastle, W. S. 78

Hardh, J. E. 5678, 7605

Hårdh, K. 2738, 5678

Hardinah, S. 5188

Harding, J. A. 7669

Hardjono, A. 2463

Hardman, R. 3087, 3088, 5537, 9023

Hardon, J. J. 1602, 9184

Hårdtl, H. 6881, 8963

Hardwick, K. 4917

Hardwick, R. C. 2013

Harel, E. 1119

Hargitai, L. 6963

Harkiss, K. J. 2933, 9021

Harkness, R. W. 6325

Harman, G. E. 1226, 6860

Harmon, S. A. 1036, 1845

Harmen, G. 2286

Harnett, R. F. 2499

Harney, P. M. 7867

Harnish, W. N. 1753

Harper, C. W. 1747

Harper, R. S. 7224, 7225, 9211

Harranger, J. 2741

Harrell, A. L. 8851

Harries, H. C. 9160

Harrington, J. D. 4371

Harrington, J. F. 4372

Harris, C. M. 4303, 7542

Harris, D. 8063

Harris, F. G. 5404

Harris, G. P. 6140, 6142

Harris, J. G. S. 3906

Harris, L. 3358

Harris, R. E. 2133, 8507

Harris, R. H. G. 425, 7246

Harris, R. W. 2275

Harrison, B. H. 1340

Harrison, J. G. 5274, 5275

Harrod, M. F. 866, 3299

Harry, R. B. A. 120

Hartley, C. W. S. 9182

Hartmair, V. 476, 7585

Hartman, R. D. 2975

Hartmann, C. 8472

Hartmann, H. D. 2752, 3755

Hartmann, H. T. 6378, 9113

Hartmann, M. A. 1960

Harttrath, H. 1301

Hartwell, J. L. 775

Harun, R. M. R. 4499

Harvey, D. M. 4506

Harvey, J. C. 5859

Harvey, J. M. 2756, 4303, 7542

Harvey, R. G. 4501

Harwood, J. L. 4784

Hase, Y. 7136

Hasegawa, M. 2750

Hasegawa, S. 6367, 8108

Hasegawa, T. 8637

Hashimoto, M. 5570

Haskal, A. 8327, 9114

Haskins, F. A. 4

Haspel-Horvatović, E. 5015

Hassan, E. 2444

Hassan, Y. M. 449

Hasselbach, O. E. 698

Hasselt, R. van 4459

Hassib, M. 7660, 9008

Hasson-Porath, E. 210

Hatton, T. T., Jr. 1464, 8101

Haub, G. 1914

Hauer, B. 5950

Haug, R. M. 2789

Haugh, C. G. 1943

Haun, J. R. 2787, 5402

Haunold, A. 3042, 4749

Haupt, W. 5687

Hauskrecht, I. 6866

Hautke, P. 1421, 6280, 7994

Havelka, F. 6686

Havis, J. R. 3912, 7036

Havlíček, V. 2758

Havránek, P. 4444

Hawash, M. 2397

Hawat, H. 7619

Hawbaker, S. D. 8809

Hawker, J. S. 7594

Hawkes, J. 552

Hawthorne, B. T. 5184

Hawthorne, W. L. 3791

Hay, R. K. M. 3765, 3766

Hayashi, I. 2234, 2235

Hayashi, N. 5498

Hayashi, S. 2651, 3022

Hayden, C. W. 5237

Hayes, A. B. 6852

Hayes, A. G. 1633

Hayes, W. A. 8823

Hays, J. T. 1682

Hayslip, N. C. 7946

Hayward, A. C. 4636

Hayward, F. W. 4813

Háznagy, A. 9034

Heacock, R. A. 7975

Healey, A. 86

Healey, P. L. 5458

Healy, M. T. 1233

Heath, H. 7067, 7967, 8974, 8975

Heath, H. B. 8973

Heath, J. L. 5795

Hebert, L. P. 6428, 8195, 9266

Hecht-Buchholz, C. 5684

Heck, W. W. 3

Hedden, S. L. 4011

Hedesan, G. 7426

Hedin, P. A. 2306

Heemst, H. D. J. van 2793

Heeney, H. B. 3379

Hefendehl, F. W. 3032, 3945, 5501, 9000

Heftmann, E. 1299

Hegarty, M. P. 6783

Hegarty, T. W. 4916, 6940

Hegazi, S. M. 494

Hegde, S. V. 650

Hege, H. 1162, 2497

Heggstad, H. E. 3, 3306, 6152, 8946

Hegwood, D. A. 2010

Heichel, G. H. 3712

Heide, O. M. 7890

Heide, R. Ter 2325

Heide, W. 8285

Heilenz, S. 865

Heilman, M. D. 4921

Heimann, M. 6225, 8921

Hein, K. 4151, 7374

Heinemann, W. H., Jr. 6939

Heinlein, J. P. 3333

Heinrich, G. 9001, 9002

Heinz, D. J. 403, 1646, 2465

Heinze, K. 832

Heinze, K. G. 4054

Heit, C. E. 6981

Heitz, A. 4887

Heitzman, M. W. 3315

Hejmová, L. 47

Helber, D. 2435

Heller, H. 2404, 3154

Helling, C. S. 3

Hellings, A. J. 868

Hellqvist, H. 4438, 5802

Hellstern, B. 2968

Hellyer, A. G. L. 5470

Helm, W. 1836

Helms, K. 7713

Hemphill, D. D. 'Jr. 1197

Hemphill, D. D., Jr. 1198

Hemstreet, C. 8534

Hendershott, C. H. 4249

Henderson, C. S. 1654

Henderson, D. W. 7424

Henderson, H. M. 3013

Henderson, S. M. 3048, 9011

Henderson, W. R. 6057

Hendrickx, G. J. 1393

Hendriks, H. 3033

Hendriks, J. P. 2764, 3639

Hendrix, J. E. 3686

Henis, Y. 2239, 7900

Hennerty, M. J. 1785

Henning, G. L. 5569

Henny, R. 3917

Henry, J. E. 2113, 2114, 5908

Henry, L. K. 2347

Hensel, R. 3600

Hensley, S. D. 2472, 8193, 8239

Henson, I. E. 13

Henson, R. D. 2306

Hentig, W.-U. von 6221, 6473, 7047, 8884

Hentschel, G. 1188

Hentschel, H. 7308

Henze, J. 895, 896

Hepler, P. K. 280

Hepler, R. W. 4371

Hepp, E. 476

Herath, H. M. W. 2813

Herath, W. 3739

Herbas A., R. 2944

Herczeg, G. 5763

Heredia, A. 4531

Hérédia, N. 3601

Herfs, W. 3643

Hering, M. 113

Hérisset, A. 3962, 3963, 6285, 7103, 7985, 7991

Herklots, G. A. C. 5147

Hermann, P. 7931, 8842

Hermey, W. 6496

Hernández, I. 1538

Hernandez, T. P. 626

Hernansáez, A. 2639, 6479, 6631

Herne, D. C. 7580

Herpay, B. 4946

Herregods, H. 4679

Herregods, M. 1787, 1788, 1789, 1790, 1795, 3427, 5822, 6587

Herrera, E. J. 8548

Herrmann, F. 5407, 5411

Herrmann, K. 5691, 5879

Herth, W. 2951

Hertogh, A. A. De 295, 1362, 5429, 6177

Hertveldt, L. 5252, 8692

Hertz, L. B. 8497

Hervé, Y. 1170

Hervet, V. 2004

Hervey, A. 8929

Herwig, K. 1217

Herz, W. 2340, 2371

Hesemann, C. U. 6155

Hesling, J. J. 2121, 2484, 3878

Heslop-Harrison, J. 4, 4651, 4661, 5432

Hess, C. E. 3006

Hess, D. 6475

Hess, F. D. 628, 8769

Hess, T. 5972

Hess, U. 8041

Hess, W. M. 424, 4928

Hessel, D. 576

Hester 7524, 7525

Hetzl, D. 7995

Heuberger, J. W. 477

Heungens, A. 7942

Heursel, J. 7041, 7044, 7944

Heuser, C. W. 523, 3006, 4260

Hévin, M. 8536

Hew Choy Kean 6410

Hewitt, E. J. 2747, 3299

Hewitt, W. B. 5128, 5853

Hewson, R. T. 6879

Hewson, W. B. 1682

Hey, H. 7156

Heydecker, W. 2093, 2094

Heydendorff, R. 7809, 8763

Heyes, J. K. 221

Heymans, A. 4232

Heymans, P. 661, 662

Heyns, C. F. G. 120, 145

Hickey, K. D. 1749, 1750, 3316

Hickman, C. E. 8514

Hiddema, W. O. 7926

- Hieke, K. 2962, 4694, 4724, 5467
- Hield, H. 7059
- Hield, H. Z. 5572
- Hifny, H. A. A. 2720, 2721
- Higaki, T. 7876
- Higazy, M. K. 789
- Higgins, J. 7626
- Higinbotham, N. 7304
- Hijwegen, T. 6233
- Hikichi, M. 4766
- Hikino, H. 7999
- Hilal, S. H. 4756, 7099, 8006
- Hilborn, M. T. 954
- Hildebrandt 6496
- Hildrum, H. 3932, 6237, 7953
- Hilgeman, R. H. 1476, 1484
- Hilgenberg, W. 2915
- Hilkenbäumer, F. 894, 5719
- Hill-Cottingham, D. G. 49, 8401
- Hill, D. S. 8720
- Hill, E. C. 4816
- Hill, K. 2022
- Hill, R. D. 2797
- Hill, R. G. 546, 3541
- Hill, T. A. 871
- Hillas, J. 617, 618
- Hillebrand, W. 1901
- Hiller, H. 3891
- Hiller, R. G. 2026, 8699
- Hillier, H. G. 7035
- Hillman, J. 5909
- Hillman, J. R. 2800, 5940, 8609
- Hilton, H. W. 3258, 4886, 6431, 8245, 9241
- Hilton, R. J. 3009
- Hinkley, G. B. 8333
- Hindorf, H. 3204
- Hines, J. E. 7932
- Hino, A. 7325
- Hinrichs, H. A. 89, 90
- Hintze, S. 2244, 4449
- Hipp, T. S. 7004
- Hiramane, S. 4113
- Hiraoka, N. 9035
- Hiraoka, T. 2696
- Hirobe, M. 3111
- Hirose, K. 2413, 2430, 3322
- Hirschauer, M. 212
- Hirumi, H. 833
- Hirunypakorn, V. 7225
- Hisada, S. 4769, 9031
- Hisada, Y. 6758
- Hislop, E. C. 7385
- Hladík, F. 3482
- Hlavička, J. 4597
- Hlišč, T. 3452
- Ho, H.-K. 6368
- Ho, M.-S. 8833
- Hobman, F. R. 2479
- Hobson, L. 1517, 7164
- Hock, B. 8661
- Hock, W. K. 1146
- Hodková, J. 2367
- Hoeks, J. 5679
- Hoekstra, S. M. R. 2964
- Hoeven, A. J. M. van der 6971
- Hoeven, A. J. M. van der 6971
- Hoffman, G. M. 2206
- Hoffman, J. C. 4466
- Hoffman, M. 6145, 6479
- Hoffmann, F. 5958
- Hoffmann, I. 7389
- Hoffmann, K. 8397
- Hofmeyr, D. 4250
- Hofmeyr, J. H. 4003
- Höfner, W. 8308
- Hofstra, G. 2788
- Hogg, J. W. 1413, 3027, 3947, 7965
- Högger, C. 687
- Hogue, E. J. 7816
- Hohmann, G. 8487
- Hoitink, H. A. J. 3915
- Holdsworth, D. K. 3065
- Holdsworth, R. P. 1756, 4213
- Holevas, C. D. 864, 993, 1485
- Holfelder, E. 8420
- Holgate, M. E. 1747
- Holkamp, A. 4150, 5672
- Holland, R. W. K. 5398
- Holle, M. 1248
- Hollen, L. B. 2073
- Holley, W. D. 2178, 5403, 6966, 7863
- Holliday, P. B. 794
- Holligan, P. J. 483
- Holloway, D. M. 9040
- Holmes, A. 6463
- Holmes, L. D. 181, 5241
- Holmes, M. G. 2403
- Holsteyn, G. P. A. van 5683
- Holt, H. A. 1044
- Holtz, R. B. 5380
- Holtzhausen, L. C. 6330
- Holtzhausen, L. C. 1469
- Holubek, J. 2367
- Holubowicz, T. 970, 971, 5742
- Homa, P. 6109
- Home, P. 2082
- Homeyer, B. 446
- Homutescu, V. 2
- Honda, F. 6710, 6817
- Hong, S. B. 533, 1059
- Hönick, A. 4404
- Honig, J. 3990
- Honma, S. 4406, 4534
- Honmura, T. 1664
- Hoodless, R. A. 7324
- Hoof, P. Van 2919, 2920
- Hooger, J. 5550
- Hoogeterp, P. 734, 735, 2954, 2955, 7913
- Hook, P. 5427
- Hooker, W. J. 1195, 3698
- Hoon, B. J. 2402
- Hooper, L. J. 4132
- Hopen, H. J. 8687, 8809
- Hopfer, D. A. 90
- Hopkins, D. L. 2769, 5219, 7675
- Hopkins, T. L. 183
- Horak, A. 2797
- Horanic, G. E. 8084
- Hore, B. K. 314
- Hörhammer, L. 2371
- Hori, Y. 6826
- Horký, J. 2908
- Horn, E. 4198, 6621
- Horn, G. C. 2970, 6193, 7922
- Horn, N. L. 1885
- Hornby, C. A. 3811
- Horner, C. E. 759
- Horney, G. 3562
- Hornok, L. 8038
- Horovitz, A. 1986
- Horowitz, M. 3935
- Horowitz, M. 8066
- Horsburgh, A. S. 12
- Horst, R. K. 1333, 4626
- Horsten, J. 6006
- Horton, B. D. 5034
- Horton, R. D. 1207, 5993
- Horton, R. F. 4494
- Hortyński, J. 1069
- Horváth, E. 1679
- Horváth, I. 6064
- Horváth, J. 3703, 7961
- Hory, H.-D. 5286
- Hösel, W. 6009
- Hosny, M. M. 2396
- Hosoi, T. 6719
- Hösslin, R. von 4519
- Hough, L. 7056
- Hough, L. F. 3374
- Houghton, P. J. 2363, 2364, 5526
- House, J. 5221
- Houten, J. G. ten 4130
- Hovadik, A. 6038, 8797
- Howard, B. H. 1850, 8318
- Howard, C. M. 1867, 2702, 4331, 5100, 6163, 6694, 6699, 7528, 8747
- Howard, R. A. 5593
- Howell, G. S. 1066
- Howes, C. D. 7710
- Hoy, M. 1920
- Hoyle, B. J. 5303, 7813, 8614
- Hoysler, V. 713
- Hříčovský, I. 7421
- Hsiao, J.-Y. 8957
- Hsia, F. Y. 7260
- Hsiao, A. I. 136, 1976
- Hsiao, T. C. 7727
- Hsieh, J. H. 7234
- Hsieh, K. C. 291
- Hsieh, K.-H. 2189
- Hsieh, W. H. 4083, 4087
- Hsieh, Y. L. 7828, 8829
- Hsu, A. C. 5576, 6367
- Hsu, C.-C. 3905
- Hsu, S.-T. 180, 5247
- Hu, C. Y. 3911, 4692
- Hu, K. J. 7828, 8818, 8829
- Huang, A. H. C. 4395
- Huang, E.-S. 4759, 6282
- Huang, H.-C. 6282
- Huang, S. T. 291
- Huang, Y.-C. 6368
- Huang, Y.-J. 7253
- Huault, C. 2766
- Hubbeling, N. 6835
- Hubermann, M. 8089
- Hudská, G. 3400
- Hudson, J. P. 1717
- Hudson, K. E. 7836
- Huet, J. 1840
- Huet, J. 2650
- Huet, R. 371, 1511, 2328
- Hufford, C. D. 6292
- Hughes, A. P. 272, 7859, 7860
- Hughes, E. 4922
- Hughes, H. M. 3545, 3556, 7503, 7530, 7533, 8375
- Hughes, J. P. 4805
- Hughes, J. T. 2124, 4935
- Hughes, R. E. 1050
- Hughes, T. D. 1321, 2276
- Hui-Lin Li 9015
- Hui, W. H. 4752
- Huikari, O. 7511
- Huisman, A. H. 8305
- Hulamani, N. C. 6003
- Hulewicz, D. 126
- Hulewicz, T. 1069
- Hull, J. W. 1866, 3527, 5870
- Hull, R. 890
- Hull, R. J. 3710
- Hulmani, N. C. 567
- Hulme, A. C. 7306
- Humbert, R. P. 4894
- Humphrey, B. E. 4612, 7035
- Humphrey, W. 1326, 7847
- Humphrey, W. A. 710
- Hundeburt, H. J. 4199
- Hundtoft, E. B. 4072, 6415
- Hunek, S. 3018
- Hungary, Országos Mezőgazdasági Fajtakísérleti Intézet 1679
- Hunt, D. R. 7035
- Hunter, D. L. 70
- Hunter, J. E. 375, 1643, 2418, 4101, 7217
- Hunter, T. 1878
- Hunumantha Rao, P. 8213
- Hupila, I. 8484
- Hurd, R. G. 3296, 6925
- Hurlmann, J. H. 5428, 7573, 7851
- Hurney, A. P. 419
- Hurov, H. R. 2462
- Hurter, N. 5060, 7470
- Husabø, P. 5728
- Husain, A. 5330
- Husain, A. A. 8219
- Huskinson, N. S. 3650
- Hussain, A. 610, 666
- Hussain, A. A. 6498
- Hussain, G. 8036
- Hussain, M. H. 3080
- Hussain, S. F. 1402, 3055
- Hussein, F. 1607
- Hussey, G. 2064, 7803
- Hussey, N. W. 7837
- Husson, A. 1354
- Husson, H.-P. 1354, 1355
- Huston, F. 7657
- Hutchinson, J. 434
- Hutchinson, P. B. 8219
- Hutchison, D. J. 3100
- Huyskes, J. A. 5907
- Hwang, S.-W. 5378
- Hyland, F. 7516
- Hymowitz, T. 5997, 6858
- Iacob, N. 8516
- Iannini, B. 573, 1125, 2727, 5852, 6760
- Ibrahim, I. M. 4219
- Ibrahim, M. 1481, 1482
- Idagawa, T. 7768, 8080
- Ideta, M. 8064, 8067
- Ie, T. S. 4646
- Ignat'ev, B. D. 959
- Ignat'ev, B. D. 4975
- Ignat'ev, B. D. 4993
- Ignat'ev, B. D. 5004
- Ignatov, B. 667
- Ignatov, V. A. 6584
- Ignatova, E. 3138
- Igoshina, T. I. 4564
- Igwegbe, E. C. K. 2391
- Ihrig, E. 3628
- Iijima, T. 614, 5366
- Iino, K. 6365
- Iitaka, Y. 5527
- Ikeda, I. 2430
- Ikegami, S. 6016
- Ikegami, T. 7886
- Ikegaya, K. 4113
- Ikehara, D. K. 9191
- Ikenaga, T. 6298
- Ikrum, M. 5480
- Ikuma, H. 1673
- Ikuta, A. 5529
- Il-Young Maing 5902
- Ilany, A. 3312
- Iliev, I. 7329, 8458
- Iliev, L. 2337
- Ilieva, E. 7329
- Ilieva, S. 3037, 7085
- Ilieva, S. D. 3026
- Ilieva, V. 6494, 8302, 8303
- Il'in, L. N. 6739
- Ilsey, P. S. 7197
- Ilyas, M. 7661
- Im, Y. J. 1108
- Imai, H. 4578
- Imamaliyev, G. N. 8109
- Imanishi, H. 2217
- Imbamba, S. K. 3256
- Impellizzeri, G. 5595
- Impens, R. 5383, 5384
- Impey, R. L. 519
- Imre, S. 7107
- Inaba, T. 2000
- Inagaki, I. 4769, 9031
- Inagaki, N. 8735
- Inamdar, J. A. 5494
- Inayatullah 491, 507, 7344
- Indeherberg, J. 3059
- India, Institute of Horticultural Research, Hesaraghatta, Bangalore 2667, 2668, 3606, 3607, 3971, 4024, 4033, 4034
- India, UPASI Tea Scientific Department 1657
- Inforzato, R. 8671
- Ingamells, C. J. 7622
- Ingestad, T. 6479
- Ingham, J. L. 4137
- Inglis, I. M. 1290
- Ingram, D. S. 7632
- Ingram, J. 8342
- Ininov, B. 7676, 7682, 8767
- Innerhofer, L. 464
- Inoue, H. 6620, 7134, 8062
- Inoue, T. 4114
- Inoue, Y. 3168
- Inouye, H. 4723
- Inouye, N. 8937
- Inserra, S. 1492
- International Atomic Energy Agency 6484
- International Dendrology Society 3906
- International Potash Institute 8308
- International Society for Horticultural Science 3210, 6698, 7276, 7278
- Intrieri, C. 2632, 5143, 5707, 5761
- Ioannes, A. de 6554
- Iochev, D. 6072
- Ionescu, L. 7426

- Ionova, Z. A. 2680
Iordăchescu, O. 7809
Ippolito, G. 5845
Ippolitov, L. S. 7363, 8366
Ireland, H. M. M. 6850
Irimura, T. 2309
Irish Republic, An Foras
 Talúntais 1720, 1857, 1939,
 2909, 3957, 6482, 6770,
 7032, 8035
Irish Republic, University
 College Dublin, Faculty of
 General Agriculture 2538,
 5150
Irshad-ul-Haq Mian 5586
Irugalbandara, Z. E. 5645
Irvine, J. E. 8247, 9226, 9268
Irving, K. H. 3530
Irwin, M. A. 6286
Isaac, E. 3540, 3546
Isaacs, W. A. 774
Isaeva, I. S. 6572
Isaeva, L. I. 612
Isaichev, V. V. 2703
Isakovici, D. 6515
Isenberg, F. M. 3772, 4526
Ishaaya, I. 94
Ishida, K. 8762
Ishigaki, K. 6457
Ishiguro, T. 4393
Ishihara, M. 7136, 7140
Ishii, Y. 1698
Ishikura, N. 744
Ishizuka, Y. 4
Isin, M. M. 48
Isik, S. E. 3623
Iskric, S. 8731
Ismail, F. H. 2409
Ismail, M. A. 4009
Ismailov, N. M. 5516, 8040
Isobe, M. 4092
Isotalo, A. 2738
Israel, Ministry of Agriculture,
 Center for International
 Agricultural Cooperation
 3608
Issar, S. C. 8998
Istas, W. 4689
Iswaran, V. 208, 4497, 5271
Itagi, T. 2767
Italy, Associazione dei Dottori
 in Scienze Agrarie della
 Provincia di Catania 2159,
 5159
Italy, Istituto Sperimentale per
 l'Agrumicoltura 4118
Italy, Südtiroler Beratungsring
 für Obst- und Weinbau
 464
Italy, Università di Pisa,
 Facoltà di Agraria 6507,
 6714, 6771, 6960, 8050
Ito, H. 2132, 6931, 7589
Ito, K. 7791
Ito, P. 1606
Ito, S. 1674, 3151, 4020
Ito, T. 6872
Ivanov, A. 4327
Ivanov, I. 1896, 2711, 6717
Ivanov, S. 5069
Ivanov, V. 4327, 6698
Ivanov, V. F. 453, 509, 1743,
 5765, 8434
Ivanov, V. I. 7110
Ivanova, A. S. 5765
Ivanova, I. 2799
Ivanova, M. 5936
Ivanova, T. I. 2881
Ivanova, Y. A. 2067, 3744,
 3750
Ivanova, Ya. A. 2067
Ivashin, D. S. 1456
Iveković, V. 2661
Iversen, T.-H. 8636
Ives, D. H. 1954
Ivin, P. C. 1655
Iwagaki, I. 8064, 8067
Iwaki, M. 2254
Iwakiri, B. T. 7439
Iwano, S. 5023
Iwata, M. 5778, 5779, 6360
Iwata, T. 5821, 6872
Iwazawa, K. 8574
Iya, D. R. P. 4045
Iyengar, A. V. V. 2329
Iyengar, B. R. V. 398, 7191
Iyengar, M. A. 2371
Iyengar, M. S. 3030
Iyer, A. 1449
Iyer, P. N. S. 7056
Iyer, T. A. G. 1630
Izhar, S. 6986, 7870, 8872
Izsak, E. 6698, 6708, 8524
Izsáki, Z. 246
J. Brun-Hool 6491
Jack, R. L. 7415
Jackson, A. O. 420
Jackson, B. P. 9041
Jackson, D. C. 7534
Jackson, D. I. 195, 5994
Jackson, H. R. 179
Jackson, J. E. 1708, 1710,
 8381
Jackson, J. L., Jr. 3108
Jackson, L. P. 105, 2689,
 3532, 6685, 6688
Jackson, M. B. 2035, 3718
Jackson, N. 7928
Jackson, R. D. 4883
Jacob, H. 999, 1809
Jacoboni, N. 1521
Jacobs, C. J. 8163, 8171
Jacobs, H. S. 11
Jacobs, L. M. 8
Jacobs, W. P. 1347, 1375,
 5453, 8923
Jacobsen, P. 2916
Jacoby, B. 8697
Jacorzynski, B. 8807
Jacot, D. 5177
Jacquard, A. 331, 3010
Jacqua, G. 6847
Jacques, R. 3861
Jadhav, A. S. 9218
Jadhav, S. 1298
Jadhav, S. J. 6104
Jadin, P. 7180
Jadnanansing, R. R. 379
Jaganathan, T. 159, 1189
Jagels, R. 5358
Jäger, H.-J. 6015
Jaglan, P. S. 6486
Jahn, O. L. 2407
Jaime, S. 6693
Jain, K. K. 1405
Jain, M. K. 5455
Jain, M. R. 3016
Jain, S. C. 4778
Jain, S. R. 3016
Jaiswal, S. P. 7251
Jaiswal, V. S. 3056
Jakimow-barras, N. 8883
Jákó, N. 5141
Jaleel Ahmed, N. 6429
Jalichan, D. 1616
Jamaica, Coconut Industry
 Board 4851
Jamart, G. 4648
James, G. L. 422, 4890, 6446,
 7231, 7245
James, L. G. 640
James, N. I. 3259, 8254
James, W. C. 80
Jamiolkowska, B. 8897
Jana, S. 285
Janes, B. E. 8755
Janick, J. 1670, 3374, 3486
Janistyn, B. 334
Janjić, V. 6544, 6563
Janković, R. 6541, 6550, 6681
Janot, M.-M. 1354
Jansen van Rensburg, H. 4469
Jansma, J. D. 6132
Janson, H. F. 3376
Janson, J.-C. 2317
Janssen, G. 1975
Janssen, J. 7774
Janyška, A. 3662, 4588, 5881
Jaquemont, R. 5396
Jaques, R. P. 1172
Jaquinet, A. 584
Jarebica, D. 2656
Jarman, P. D. 3296
Jarquin, R. 7200
Jarvis, P. J. 1400
Jarvis, W. R. 5184
Jaša, B. 2753, 2758, 2836,
 2893, 5323
Jasa, B. 6212
Jaschkowa, V. 923
Jash, M. 266
Jassal, N. S. 8664
Jauhari, O. S. 559, 568, 842,
 3210, 3224
Jaumień, F. 8468
Javoy, M. 1192
Jawanda, J. S. 554, 3212,
 5584, 6371, 7161, 7162,
 8104
Jaworski, C. A. 3774
Jayakar, M. 2849
Jayakaran, M. 8757
Jayaram, M. 1534
Jayaraman, S. 808
Jaynes, R. A. 322, 7057
Jazbec, M. 7495, 8466
Jeannin, G. 4398
Jedličková, J. 2893
Jeffcoat, B. 2191, 6140
Jefferies, T. M. 3087
Jeffers, J. N. R. 7035
Jeffery, L. S. 6842
Jelaska, S. 5229
Jenkins, J. M. 2237
Jenkins, P. T. 3496
Jenkins, S. F., Jr. 6057
Jennen, A. 2300
Jennings, P. H. 6020
Jennings, W. G. 2441, 5793
Jensen, F. 1920, 1922
Jensen, H.-E. K. 3839, 3867
Jensen, H. J. 2484
Jensen, M. C. 640
Jensen, M. H. 3625
Jenser, G. 7322, 7323, 7371,
 7384
Jeon, I. J. 8669
Jesus, J. De 2074
Jeszenák, G. 246
Jevremović, V. 6626
Jeyarajan, R. 569, 2846, 6754,
 7143, 8559
Jha, A. 6894
Jhang, J. J. 1444
Jhooty, J. S. 6861
Jindra, A. 3078
Jindrová, H. 8427
Jiřík, J. 4418
Joffe, A. Z. 369, 6327
Johansson, J. 7854
John, M. K. 4437, 5809
Johnnykuty, A. T. 220
Johnson, A. W. 751
Johnson, C. M. 173
Johnson, C. R. 5402
Johnson, D. 1458, 3091, 4780,
 8049
Johnson, E. 1323
Johnson, F. 530, 5087
Johnson, H. 1886
Johnson, H., Jr. 1202
Johnson, H. M. 187
Johnson, J. F. 5750, 7408
Johnson, L. A. 7592
Johnson, L. C. 5461
Johnson, P. H. 4380
Johnson, P. W. 5351, 7452
Johnson, S. R. 2144
Johnson, W. B. 2889
Johnsson, A. 8928
Johnston, M. A. 411
Johnston, R. E. 3640, 5332
Johnston, W. E. 5777
Joiner, J. N. 1376, 7045
Jolad, S. 8028
Jolivet, J. 6285, 7985, 7991
Jolles, C. 6307
Jolliffe, P. A. 8500
Jona, R. 368
Jones, A. C. 5780
Jones, A. L. 7481
Jones, A. T. 4317
Jones, B. M. 3408, 3474, 5039
Jones, C. D. 1620
Jones, C. M. 1182
Jones, D. A. 8798
Jones, D. T. 307
Jones, G. E. 7040
Jones, H. G. 2508
Jones, J. B., Jr. 1821
Jones, J. P. 1288, 2110, 2860,
 4570, 6914, 6918, 7797,
 7799
Jones, J. W. 2405
Jones, K. 4609
Jones, L. A. 9024
Jones, L. H. 7083
Jones, O. P. 7399
Jones, P. R. 1050
Jones, R. A. 81, 1837
Jones, R. C. 6374
Jones, R. H. 3247
Jones, W. C. 1326, 3007, 7847
Jones, W. W. 798, 4791, 9086
Jong, C. 1838
Jongenotter, W. 2183
Jonkers, J. 8714
Jönsson, H. A. 3884
Joo, P. K. 7625
Joose, M. L. 8405
Joose, M. L. 7461
Jopling, C. 4609
Jordan, E. G. 6945
Jordan, V. W. L. 110, 111,
 1878
Jordović, M. 2519, 6683
Jose, A. I. 7072, 7978
Josefsson, E. 3020
Joseph, H. 3987
Joseph, K. J. 3190
Joseph, T. 6402
Joshi, B. C. 1449
Joshi, D. P. 3691
Joshi, L. K. 1459, 6445, 7118
Joshi, P. 9046
Joshi, P. M. 8216
Joshi, R. D. 7000
Joshi, R. K. 6049
Joshi, S. C. 1178
Joshua, A. 2093, 2094
Josifović, M. 2519
Jouan, B. 1170
Joubert, A. J. J. 8111
Joubert, D. J. 7576
Joubert, J. J. 2961, 8608
Joubert, J. S. G. 5503
Joubert, T. G. la G. 4522
Jouret, C. 5064, 5065
Jovančević, R. 3375
Jovanić, R. 2520
Jovanović, M. 6559
Jovanović, P. 2520
Joy, P. J. 3190
Juang, T. C. 8212
Juárez, B. E. 772
Juárez, J., Jr. 8201
Juhász, K. 6799
Julia, J. F. 9188
Jullien, M. 8734
Jung, S. M. 1108
Jungbauer, J. 8875
Jungk, A. 7789
Junnonen, S. 8936
Junttila, O. 8959
Juska, F. V. 4672
Juste, C. 1107
Jyotishi, R. P. 3210, 3222
K., O. 2279
Kaan, F. 4568, 5945, 6888
Kaars Sijpesteijn, A. 5355
Kabanov, V. V. 2815, 3734,
 6927
Kabir, S. M. H. 2123
Kable, P. F. 3473, 5038, 6634
Kachanova, N. I. 5797
Kacharmazov, V. 7536
Kachecheba, J. L. 4720
Kachru, R. B. 6718
Kaczóán, V. 3622
Kádas, L. 1545
Kader, E. M. A. 3049, 9063,
 9064
Kadiev, T. Sh. 6078
Kadir, G. O. 5279
Kadouri, A. 2005
Kadoya, K. 2398
Kaeiser, M. 5067
Kagawa, T. 7690
Kageyama, M. 2870
Kageyama, M. E. 1255

- Kahan, G. 8984
 Kahan, R. S. 3771
 Kahana, I. 210
 Kaheru, R. B. 3237, 3241
 Kahlon, A. S. 9082
 Kaiery, E. 652
 Kaïmakan, I. V. 1032, 5744
 Kaiser, W. J. 8707
 Kajiura, I. 5778, 5779, 6360, 7154
 Kajiura, T. 2000, 3319
 Kakde, J. R. 1634, 3257
 Kakehi, M. 2923
 Kakhniashvili, Z. A. 3098
 Kakiuchi, N. 4020
 Kalacheva, L. I. 5199
 Kalaidzhiev, I. 213, 6257
 Kalanova, A. I. 2989, 2993
 Kalburov, G. 7777
 Kalda, T. S. 3782, 6050
 Kalinichenko, G. V. 2647
 Kalinichenko, I. M. 6531
 Kalinin, F. L. 2051
 Kalinke, H. 553
 Kalla, A. K. 2246, 6178
 Kallauch, W. 7047
 Kállay, T. 6622
 Kallio, T. K. 8950
 Kalloo 205
 Kalma, J. D. 1472
 Kaloshina, G. S. 3741
 Kaloshina, N. A. 8005
 Kalra, S. K. 5584, 6371, 6933
 Kalyanaraman, V. M. 1279
 Kalyanasundaram, P. 9177
 Kal'yanova, R. G. 629
 Kamalam, N. 5497
 Kamalanathan, S. 697, 5223, 5230, 6810
 Kamali, A. R. 1462
 Kamat, K. L. 1641
 Kameda, S. S. 9241
 Kamel, S. H. 4495
 Kamelina, O. P. 281
 Kamemoto, H. 4682
 Kameneva, E. A. 8977
 Kamerbeek, G. A. 2245
 Kamerman, W. 4656
 Kami, T. 3022
 Kamimura, S. 7791
 Kamin, L. F. 7735
 Kaminska, M. 7377
 Kamisaka, S. 138, 8599
 Kamoen, O. 2222, 4648
 Kampe, W. 6795, 7627, 7648
 Kanai, R. 9260
 Kaname, T. 2767
 Kanash, E. V. 7722
 Kanaujia, R. S. 8772
 Kanazawa, J. 3328
 Kanbe, K. 2550, 2551
 Kandaswamy, T. K. 6887, 8880
 Kandaurova, È. F. 6528
 Kandeikina, V. I. 4957
 Kaneda, M. 5527
 Kaneko, K. 3057, 6592
 Kang, B. G. 1235, 2059, 3335, 4508, 8630
 Kannaiyan, S. 8654
 Kanta, V. 1488
 Kantarev, I. 4361
 Kanthamani, S. 8278
 Kanwar, J. S. 1592
 Kanwar, R. S. 426
 Kanwar, Z. S. 9118
 Kao, H.-Y. 4043
 Kao, K. N. 1306
 Kao, M. M. 5652
 Kapadia, G. J. 3080
 Kapelev, I. G. 7984, 8025
 Kapeller, K. 6053
 Kapetanović, N. 3508, 6613, 7468
 Kapil, R. S. 4760
 Kapitány, J. 6037
 Kaplan, J. 2417
 Kapoor, J. K. 3676
 Kapoor, L. D. 7065
 Kapoor, M. L. 8385
 Kapoor, P. C. 8202
 Kapoor, S. L. 7065
 Kapoor, S. P. 8559
 Kapoor, V. 671
 Kappen, L. 8426
 Kappler, H. 4131
 Kapranova, N. N. 6241
 Kapur, B. M. 765
 Kar, K. 4098, 7237, 8194, 8202, 9250
 Karacali, I. 7406
 Karacharova, L. P. 7460
 Karakhanova, S. V. 858
 Karamysheva, V. I. 2521, 7416
 Karapetyan, K. A. 5773
 Karawya, M. S. 9063, 9064
 Karaya-Chikvatiya, R. K. 3106
 Karchi, Z. 5228
 Karg, W. 7391, 8394
 Kari, J. M. 430
 Karikari, S. K. 7215
 Kariya, K. 8628
 Karlín, V. R. 8046
 Karlsson, H. G. 8928
 Karnatz, A. 104
 Karnick, C. R. 356
 Karnikova, L. D. 4310, 6671
 Karov, S. 4951, 4952, 6609
 Karov, S. P. 8713
 Karova, V. 6612
 Karpenchuk, G. K. 8378
 Karpova, G. Ya. 6269
 Karsten, J. E. 4374
 Kartalov, P. 441, 4536, 5333, 8784
 Kartalov, T. 6811
 Kartalov, V. 8771
 Kartha, A. R. S. 3336
 Kartha, K.-K. 762
 Kartmazova, L. S. 2335, 3968
 Kartnig, T. 9049
 Karunanayake, E. H. 6465
 Karyakina, T. I. 3741
 Karzov, V. F. 6764, 7563
 Karzova, V. V. 6764, 7563
 Kasai, K. 6459
 Kasbekar, M. G. 2373
 Kashakashvili, Ts. S. 4801, 7126
 Kashiwa, T. 4936
 Kashyap, R. 3210, 3222
 Kasi Viswanathan, P. R. 8153
 Kasimatis, A. N. 2732, 8547
 Kasinathan, S. 3974
 Kask, K. 268
 Kasmire, R. F. 2134
 Kaspers, H. 5006
 Kasprzyk, Z. 4637
 Kassam, A. H. 1222
 Kassem, E. S. 8250
 Kassrawi, M. 6762, 8555
 Kasumov, M. A. 3943
 Kasumova, M. K. 5115
 Katán, J. 1267, 2843
 Katayama, O. 6592
 Katerov, K. 1079, 4336, 8537
 Kathiravetpillai, A. 6461
 Kathju, S. 2808
 Katiman 6422
 Kato, T. 2098, 4517
 Kato, Y. 4115
 Katoch, D. C. 8266
 Katsumi, M. 138
 Katz, M. 2297
 Kaufmann, H.-G. 709, 2160
 Kaufmann, M. R. 3140, 6356
 Kaufmann, W. 6384
 Kaukovirta, E. 7855, 8843
 Kaul, D. L. 3671
 Kaul, G. L. 9101
 Kaul, K. 2271
 Kaushik, D. D. 2808
 Kavanagh, T. 2900, 7607
 Kavanagh, T. E. 2446
 Kavathekar, A. K. 6949
 Kavka, B. 2274
 Kawabata, A. 3160
 Kawahara, T. 1698, 2507, 2762, 4546, 4900
 Kawakubo, U. 5366
 Kawamoto, S. O. 5310, 5311, 6883
 Kawase, K. 6624
 Kawase, M. 3837
 Kawecki, Z. 968
 Kayange 4895
 Kaye, G. R. 4159, 4212
 Kazakov, I. V. 8464
 Kazakova, A. A. 4520, 4521, 5158
 Kazantseva, A. E. 8479
 Kazantseva, L. P. 581
 Kazarinov, G. E. 6172
 Kazaryan, V. O. 2589, 5842
 Kazda, V. 2004
 Kazimirova, R. N. 2187, 2188, 7856
 K"drev, T. 3800
 Keane, P. J. 3184
 Kearney, P. C. 3
 Kechakmadze, L. A. 3166
 Kedar, N. 1199, 2086, 2832, 3688, 4525, 5227
 Keefer, R. F. 8514
 Keeney, P. G. 2446
 Keep, E. 6680
 Keetch, D. P. 4835, 7608
 Kefeli, V. I. 193, 4513
 Kefford, N. P. 8640
 Kegler, H. 7321, 8436
 Keh, C. H. 6384
 Keil, H. L. 515, 1832, 4275, 5049
 Keipert, K. 979, 7504, 7506, 7518
 Kekwick, R. G. O. 2030, 8700
 Kelderman, W. 3325
 Keleberda, M. I. 3590, 8539
 Keller, H. 4867
 Keller, S. 8395
 Keller, W. J. 8014
 Kelley, J. D. 2311
 Kellmer, L. H., Jr. 5427
 Kelly, G. J. 3740, 8724
 Kelly, J. F. 4941
 Kelm, I. 119, 5161
 Kelsey, L. P. 4540
 Kelts, L. J. 5853
 Kemp, E. E. 7035
 Kemp, G. A. 2491
 Kemp, J. G. 5695
 Kemp, T. R. 2008, 2783
 Kemp, W. G. 2841
 Kemper, J. D. 8939
 Kempler, H. 6889
 Kempton, D. P. H. 3666
 Kempton, R. J. 2137, 2755, 8789
 Kender, W. J. 965, 6728
 Kendrick, R. E. 3736
 Kennedy, D. M. 1074
 Kennel, W. 1752, 8439
 Kennett, C. 9097
 Kenny, T. A. 3522
 Kent, S. S. 4491, 4492
 Kenworthy, A. L. 32, 2612
 Kenya, Coffee Research Foundation 3191
 Kenya, Tea Research Institute of East Africa 7264
 Keplinger, J. A. 8490
 Kerbabaev, B. B. 7108
 Kerekes, J. 6766, 8038
 Kerkadze, D. V. 4029
 Kerkadze, I. G. 3268
 Kern, H. 2055
 Kern, J. 2967
 Kerner, E. 1924
 Kerr, A. 443, 2642
 Kerr, E. D. 644
 Kesheva, A. T. 6078, 7568
 Kessel, R. H. J. 4593
 Kesteren, H. A. Van 1374
 Kesterson, J. W. 4022
 Ketchie, D. O. 4994, 5710
 Ketskhoveli, E. N. 8944
 Key, J. L. 226, 1234, 7734
 Kezeli, T. A. 7717
 Kfir, R. 1490
 Khabazi, Z. 5534
 Khachatryan, S. S. 1894, 7547
 Khachidze, O. T. 7587
 Khadem, S. H. 3600
 Khadr, A. S. 6819
 Khadzhiev, T. 1908
 Khafagy, S. M. 6301, 6302
 Khaisin, M. F. 6033, 6882
 Khalezova, T. V. 7117
 Khalifa, T. I. 9063, 9064
 Khalilov, È. K. 4339
 Khalimbekov, S. Kh. 5701
 Khalin, G. A. 2540, 4287, 8354
 Khalmatov, Kh. Kh. 5525, 9016
 Khan, A. H. 2809
 Khan, A. M. M. A. 725
 Khan, D. A. 1176
 Khan, M. H. 2123
 Khan, M. I. 5480
 Khan, M. N. A. 336, 1418
 Khan, M. S. 4084
 Khan, M. Z. 8444
 Khan, W. M. A. 725
 Khandelwal, R. C. 7746
 Khandobina, L. M. 2897
 Khanduja, S. D. 1892, 8571
 Khanin, Ya. D. 1111, 1112, 1113, 5105, 5124
 Khanna, P. 1433, 1439, 4778
 Khanna, P. L. 9047
 Kharanyan, N. N. 5258
 Kharchenko, L. N. 7969, 9770
 Khar'kova, A. P. 5350
 Khashimov, F. Kh. 8553
 Khatri, H. L. 8760
 Khireba, A. Kh. A. 5316
 Khlopenkova, L. P. 4645
 Khmelevskaya, M. A. 7578
 Kho, Y. O. 7898
 Khodak, V. A. 5121
 Khodzhiev, A. Kh. 8712
 Khokhlova, V. A. 2780
 Kholchenkov, V. A. 1760, 4217
 Khomenko, A. D. 7743
 Khomyakov, M. T. 1755
 Khort, T. P. 2224
 Khosa, R. L. 3973
 Khoshoo, T. N. 3881
 Khosla, H. K. 6823
 Khossussi, M. 7135
 Khovanskaya, N. V. 7806
 Khrapova, A. D. 5955
 Khretonova, T. I. 8812
 Khrichenko, E. M. 1043
 Khristov, A. 7571
 Khristov, L. 4315, 4324
 Khristova, E. 6500, 7687
 Khristova, I. 3810
 Khrobockek, È. 5881
 Khryanin, V. N. 8002
 Khrypova, N. Kh. 969
 Khrzhanovskii, V. G. 5520
 Khubutiy, R. A. A. 2495
 Khudaibergenov, È. B. 1457
 Khudairi, A. K. 220
 Khurana, S. M. P. 6427, 9132
 Khuroshvili, K. G. 3142
 Khurtsidze, A. L. 3991
 Khvatysh, G. A. 4436
 Kidwai, M. A. 8998
 Kidwai, P. 4402
 Kiely, T. B. 1478
 Kihara, Y. 3160
 Kiigemagi, U. 8997
 Kikacheishvili, Z. N. 364
 Kikvadze, I. V. 3166
 Kikvadze, N. A. 364
 Kilby, M. W. 1066
 Kilpatrick, J. J. 7223
 Kim, B. D. 1201
 Kim, C. W. 779, 2007
 Kim, D. S. 1312, 2147, 2148, 2149
 Kim, G. P. 2147, 2148, 3826
 Kim, H. K. 1179, 2343
 Kim, H. S. 784, 785, 1256
 Kim, J. H. 1059
 Kim, J. J. 1179
 Kim, J. K. 674, 2338
 Kim, J. S. 727, 728, 2339
 Kim, J. Y. 5518
 Kim, K. J. 541
 Kim, K.-K. 1380
 Kim, K. R. 522, 952
 Kim, K. S. 2020
 Kim, M. 593
 Kim, M. H. 1754
 Kim, O. S. 3826

- Kim, S. 593
 Kim, S. C. 475
 Kim, T. B. 2338
 Kim, Y. C. 1270, 5189
 Kim, Y. H. 533, 1059
 Kim, Y. M. 982, 1256
 Kim, Y. S. 3826
 Kimati, H. 4065, 5234
 Kimball, B. A. 7294
 Kimmings, R. K. 1336, 6176
 Kimoto, T. 2082
 Kimura, H. 8650
 Kimura, O. 4528, 4533, 5328
 Kimura, Y. 1359
 Kimutsadze, G. P. 7268
 Kin', I. I. 7269
 Kinet, J. M. 333
 King, B. 6786
 King, J. W. 301
 King, P. 6416
 King, R. F. 7242
 Kinloch, R. A. 686
 Kinoshita, K. 5957, 6417
 Kinoshita, S. 8126
 Kinpara, T. 8071
 Kipiani, E. Ya. 3270
 Kiplinger, D. C. 2251, 2252, 3869, 8864
 Kipps, A. 7725
 Kiprin, V. I. 870
 Király, Z. 2792, 3316
 Kirby, A. H. M. 444
 Kirby, L. K. 1654, 6452, 9232
 Kirch, K. 5131
 Kirdyashkina, R. I. 4313
 Kirichek, I. M. 5700
 Kirik, N. N. 5277, 7730
 Kirikoi, Ya, T. 5868, 6748, 6761
 Kirillova, È. N. 6579
 Kirk, H. J. 2706
 Kirk, J. T. O. 8694
 Kirkham, M. B. 1181, 2790
 Kirkpatrick, B. L. 5102
 Kirov, N. 7472
 Kirschner, H. 3008
 Kirtany, J. K. 3089
 Kirtbaya, E. A. 5701
 Kirtbaya, E. K. 5700
 Kir'yanov, I. G. 6540
 Kiryukhina, N. N. 5190
 Kish, A. J. 1220
 Kishaba, A. N. 4443
 Kishi, K. 3124, 3320, 6642, 6917
 Kishimoto, O. 6639
 Kislyuk, I. M. 2003
 Kiss, A. 6571
 Kiss, A. 6733
 Kiss, L. Z. 6614
 Kiss, S. A. 5162
 Kissler, J. J. 7573
 Kitagawa, H. 6361
 Kitahara, Y. 4517
 Kitajima, E. W. 4797
 Kitajima, H. 7448
 Kitlaev, V. N. 2728
 Kitsno, V. E. 7730
 Kitze, C. 7079
 Kiumehr, N. 1450
 Kivite, S. È. 5990
 Kiyokawa, I. 5043
 Kiyoto, M. 2782
 Klad'ko, V. M. 6574
 Klapwijk, D. 2115
 Klar, A. E. 5296, 5297
 Klas, J. 2052
 Klásek, A. 5517
 Klasová, A. 2052
 K'lbava, V. 7698
 Kleinfeld, Y. 4558, 6066
 Klein, D. T. 892
 Klein, M. 1373
 Klein, R. M. 892, 5485
 Kleinert, W. 4824
 Kleinhempel, H. 5164, 5410, 7298, 7321
 Kleinschmidt, G. D. 7132
 Klement, Z. 7423
 Klenzner, A. 4934
 Klerk, C. A. de 4352
 Klett, J. E. 1321, 2276
 K'lev, I. 1104
 Klevtsov, M. M. 7775
 Klewitz, R. 6116
 Kliever, W. M. 583, 3595, 8547, 8567
 Kligerman, I. I. 7577, 8564
 Klimashevskii, È. L. 6864, 7728, 8721
 Klimenko, K. T. 737
 Klimenko, V. G. 197
 Klimes, K. 2356
 Klimovitskaya, Z. M. 5284
 Klingler, J. 1919
 Klören, M. 1917
 Klotz, L. J. 2387, 4001, 4787, 6329
 Klougart, A. 5427
 Kloutvor, J. 3438, 3441
 Klotz, J. 3723
 Klotzová, E. 3723
 Kluczyńska, J. 7496
 Klueter, H. H. 276
 Klüsche, M. 8894
 Klyshev, L. K. 8722
 Klyueva, M. P. 1732
 Knaap, W. Van der 1283
 Knaflewski, M. 696
 Knapp, F. F. 4042
 Knapp, F. W. 5092
 Knapp, J. E. 2360
 Knauss, J. F. 1377, 6204, 7024, 7027, 8924
 Knavel, D. E. 1291, 1993, 2008, 2783
 Knecht, G. N. 3715
 Knee, M. 52, 6603
 Kneebone, L. R. 6950, 8820
 Kneeg, E. 7289
 Kneissl, P. 2196, 8871, 8896
 Knezek, B. D. 2019
 Knight, A. H. 7873, 7874
 Knight, R. J., Jr. 4785, 5627, 7202
 Knight, R. L. 2539
 Knoblauch, F. 2489
 Knoll, J. 464
 Knop, K. 2814
 Knösel, D. 6849
 Knoth, R. 5407
 Knott, L. 5512
 Knowles, J. H. 1559
 Knox, R. B. 4651
 Knox, R. L. 3948
 Knyaginichev, M. I. 649
 Knyazeva, O. M. 3000
 Knyaz'kov, V. V. 2595
 Knypl, J. S. 137, 151
 Ko, W. H. 122
 Ko, Y. S. 2339, 2374
 Kobakhidze, Sh. K. 7271
 Kobayashi, K. 2730
 Kobel, F. 4322
 Koberstein, S. 7389
 Koblet, W. 1926, 4353, 5125, 5836, 5849, 7560
 Koblicová, Z. 2367
 Kochba, J. 4166, 4341, 5708, 6333
 Kocher, F. 535, 1064, 8494, 8495
 Kochiashvili, N. S. 8270
 Kochkin, M. A. 453, 764, 2187, 8435
 Cockemoer, W. 1502
 Kocúr, J. 2049
 Kodua, M. 7158
 Koenig, J. 6954
 Koenig, M. J. P. 7262
 Koenig, R. 7017
 Koenig, R. T. 8989
 Koerwer, J. F. 8914
 Koev, K. M. 1083, 2708
 Koevenig, J. L. 1375, 7881, 8876
 Kof, E. M. 193
 Kofranek, A. M. 4631, 6479
 Koga, H. 8068
 Koháry, E. 7316
 Kohl, H. C. 2301
 Kohli, R. R. 7204, 8127
 Kohlmann, J. 342, 5507, 6279, 9010
 Kohysaeva, K. G. 1871
 Koïnov, G. 8670
 Kokaya, Ts. D. 3143
 Kokhanova, L. T. 5701
 Kokubo, E. 7997
 Kolarova, M. 5236
 Kolátorová, E. 4714
 Kolattukudy, P. E. 7742
 Kolb, W. 7919
 Kolbe, W. 953, 5719, 7509, 7539, 8376
 Kolcheva, B. 6734
 Kolek, J. 2052
 Kolesnik, A. A. 56
 Kolesnikov, A. I. 2622, 5699
 Kolesnikov, D. G. 1403
 Kolesnikov, V. A. 1, 1948, 8382
 Kolesnikova, A. F. 2622, 5699
 Kolev, E. 2736, 4373
 Kolev, K. D. 2580
 Kollányi, L. 7510
 Köllner, V. 6974
 Kololgi, S. D. 567, 2715, 6003
 Kolomiets, I. A. 2542
 Kolontayev, V. M. 8338
 Kotata, E. 1246
 Koltai, M. 9056
 Kol'tsova, A. S. 2224, 3865
 Kolupaeva, K. G. 1870
 Komae, H. 5498
 Komamine, A. 1305, 4592
 Komarova, R. A. 6117
 Komissarenko, N. F. 1403
 Komizerko, E. I. 8812
 Komosa, A. 6145
 Komoto, N. 6016
 Komuro, Y. 1999, 2254, 7904, 8451
 Kon, K. 2550, 2551
 Konarli, O. 7523
 Kondakov, A. K. 2572
 Kondarev, M. 2712, 5109, 6716, 7548, 7552
 Kondo, I. N. 7559
 Kondratenko, P. T. 5534
 Kondrat'ev, V. D. 6582
 Kondrya, S. M. 7588
 Konečný, K. 4714
 Kong, S. J. 1059
 Koniarek, M. 8774
 Konishi, S. 4114, 4906
 Konno, S. 7140
 Konobeev, A. S. 2544
 Kononikhina, N. F. 6299
 Konoshima, M. 9035
 Konovalov, I. N. 8965
 Konrad, K. 5197
 Konler, T. R. 6068
 Konstantinov, L. K. 933, 6537, 7396
 Koo, R. C. J. 3115, 5631, 5632
 Koomen, N. C. A. 8611
 Koopmans, W. 1265, 1962, 2751, 2858, 3781, 6787
 Kopcewicz, J. 5260
 Kopchev, G. 1278, 5304
 Kopeček, T. 7541
 Kopecký, J. 3043, 7089
 Kopylov, N. I. 960
 Kopyshinskiĭ, P. V. 1733
 Korać, M. 3385, 3386, 6512, 6545
 Kordan, H. A. 1496
 Koren', N. F. 4729
 Koresheva, R. N. 4304
 Korhonen, I. 60
 Koriyama, S. 7999
 Kormilitsyn, A. M. 1383, 3909
 Korn, R. W. 5406
 Korneichuk, V. A. 5369
 Kornešku, A. S. 4962
 Korneva, E. I. 5534
 Korobets, P. V. 4339
 Korobko, A. P. 6102
 Korobko, I. I. 1110
 Korobov, V. I. 2292
 Koronowski, P. 3672
 Korsungkaya, G. I. 7066
 Kortov, A. M. 1858
 Kortšhak, H. P. 9261
 Korver, O. 4908
 Korzun, G. P. 254
 Kosaka, S. 4477
 Kosela, S. 5498
 Koseva, D. 338, 339, 2323, 3952, 5499
 Koshelev, V. K. 2554
 Kosher, L. N. 466, 3403, 7369
 Koshevskii, I. I. 7730
 Koshoev, K. K. 2334
 Kositsin, A. V. 4564
 Kosmodamianskaya, M. M. 6192
 Kosova, A. I. 6033
 Kostadinov, I. 5379, 8831
 Kostecka-Madalska, O. 9032
 Koster, J. 2256
 Kostroma, E. Yu. 1805, 5062
 Kosugi, K. 5460, 8938
 Kosykh, S. A. 462
 Kotyalawa, J. 3216, 4879, 5625
 Kotetsov, P. 6578, 8393
 Kotheimer, J. B. 4715
 Kotheis, J. S. 7925
 Kotoman, E. M. 6582
 Kotovich, I. N. 1730, 6494, 8302, 8303
 Kotsev, K. 6578, 8393
 Kotzé, J. M. 3232, 8162
 Kotzé, W. A. G. 3802, 5730, 8619
 Kouchehi, H. K. 8869
 Koutnik, V. 5323
 Kouyech, H. 454
 Kovachev, G. 7413, 7420
 Kovacs, M. F., Jr. 5255
 Kovács, Z. 6514
 Koval', G. K. 4299, 5025
 Kovalenko, A. K. 4713
 Kovalenko, V. F. 1742
 Kovaleva, A. N. 7281
 Kovoar, A. 4398
 Kowaka, M. 7997
 Kowalewski, Z. 8961
 Kowalska, A. 5399
 Kozel, P. C. 8864
 Kozhanova, N. I. 3512, 3598
 Kozhin, S. A. 2322
 Kozhina, I. S. 763
 Kozjek, F. 9065
 Kozlov, P. I. 939, 4969
 Kozma, P. 6720, 6766
 Kozma, T. 6604
 Kozukue, N. 4543, 6047, 6048, 8758
 Krajný, P. 7387
 Králik, O. 4984
 Kramarovskiy, E. 7789, 8603
 Kramer, D. 2941
 Kramer, S. 936, 937, 938, 1736
 Kranz, J. 4126
 Krapf, B. 517, 8408
 Krasavina, M. S. 2778, 5224
 Krasavtsev, O. A. 7397
 Krasnova, T. N. 306
 Krasnyuk, S. E. 3590
 Krasnyuk, S. E. 8539
 Krasnyuk, S. E. 8539
 Kratky, B. A. 1140
 Kraus, J. 1162
 Kraus, V. 4348
 Krause, R. T. 2500
 Krause, W. 1099, 1280
 Krauss, A. 865
 Krauss, B. H. 4821
 Kravets, A. F. 249
 Kravtsov, P. V. 2546
 K'rdzhieva, N. 8594
 Krebs, C. 7348
 Kreidl, H. 1769, 4988
 Krejčík, V. 8030
 Krejčová, J. 2613, 5800
 Kreknin, N. Ya. 7477
 Kremer, F. W. 5738
 Kretchman, D. W. 2113, 2114, 2863, 2864, 2886, 4566
 Kretchun, T. 1323
 Kretovich, V. L. 2061, 3741, 4903, 8723
 Kretschmer, M. 5922
 Kreuzaler, F. 8983
 Krezdorn, A. H. 1007, 3102, 5546

- Kricnar, M. 3352
Kriedemann, P. E. 194, 3332, 6353, 6357, 8565
Krigere, G. Ya. 6946
Krikmane, M. A. 5990
Krikun, J. 3325
Krise, J. 2908
Krishnamoorthy, K. K. 5497
Krishnamoorthy, V. S. 1630
Krishnamurthy, S. 3210
Krishnamurti, M. 766
Krishnan, P. 1556
Krishnan, R. G. 9163, 9169
Krishnaprasad, N. K. 1534
Krishnaswamy, N. R. 4765
Kristen, U. 2765
Kristensen, H. R. 2916
Kriventsov, V. I. 858, 7453
Krivoruchko, G. I. 8378
Krivut, B. A. 782
Křiz, J. 3046
Krizek, D. T. 6996
Krizek, D. T. 276, 2940, 4726
Krnjaic, D. 5853
Kröber, H. 1958, 7889, 8878
Krochmal, A. 6303, 8029
Krödel, F. 6496
Królikowska, M. 7053
Kröller, E. 4019
Kromer, K. H. 1943
Kronenberg, G. 7524, 7525
Kronenberg, H. G. 142, 3553, 8631
Kroon, G. H. 3862, 7891
Kropis, E. P. 5062
Krotova, O. A. 5941
Kr"steva, M. 985
Krueger, H. R. 1292, 4577
Krug, H. 8293
Kruglyakov, G. N. 5667
Krukoff, B. A. 6317
Krull, E. 5924
Krumov, I. 8537
Krupa, S. 7435
Krüssmann, G. 3906, 5470
Kruzhilin, A. S. 8632
Krylatov, A. K. 8554
Krylov, S. V. 6026
Krylova, I. I. 7350
Krylova, I. L. 2358
Kryukova, L. M. 7109
Kubeczka, K. H. 8037
Kubelka, W. 6292
Kubica, S. 3732
Kubota, S. 5567, 5568, 7157, 8086, 8093, 9084, 9085
Kuč, J. 3316, 5981
Kučera, M. 3066
Kučero, H. 3066
Kucherenko, V. P. 1240
Kuchkarov, S. 1304
Kuchkarov, S. K. 6833
Kudasov, Yu. L. 7332
Kudinov, V. I. 4191
Kudratov, R. 931
Kudryavets, R. P. 7364, 8337
Kuhlen, E. 4732
Kühne, H. 2173
Kuiken, J. C. J. 1974
Kuiper, K. 2258, 3317
Kuiper, P. J. C. 1673, 2027, 2963
Kukhta, E. P. 1923
Kukulczanka, K. 8935
Kulaeva, O. N. 2780
Kulasegaram, S. 6461
Kulescha, Z. 131
Kulibaba, Yu. F. 2200
Kuliev, A. A. 3162
Kulieva, N. S. 4579
Kulikov, B. N. 1241
Kulikov, G. V. 1382, 2302, 2999, 3293
Kulikova, N. T. 5375
Kulkarni, J. B. 619
Kulkarni, S. N. 4529, 7274
Kuller, Z. 2369
Kulshreshtha, D. K. 8008
Kulshreshtha, M. J. 2336
Kumamoto, J. 224, 1154, 6331
Kumar, A. 1632, 8251
Kumar, A. C. 8153
Kumar, J. C. 677
Kumar, M. 7883
Kumar, P. S. S. 3069
Kumar, S. 231, 852
Kumaraperumal, N. 9227
Kumashiro, K. 1835
Kume, Y. 2550, 2551
Kundert, J. 5860
Kunesch, N. 1427
Kunimoto, R. K. 375, 2418
Kunisaki, J. 712
Kunisaki, J. T. 1380
Kunishi, A. 3335
Kuniyasu, K. 2859
Kuntze, H. 7782
Kunze, L. 6566
Kuperman, F. M. 5199
Kuppuswami, N. T. 853
Kuramoto, M. 1983
Kuramoto, T. 3151
Kuraoka, T. 7325
Kureel, D. C. 9250
Kureteni, M. 6751, 6752, 6753
Kurian, C. 1562, 8142, 9157, 9159
Kuriganova, P. M. 1061
Kuriyama, T. 2111, 2859
Kurki, I. 2738
Kurki, L. 8649
Kuroiwa, Y. 7997
Kürten, S. V. 7104
Kuryndina, T. I. 2561, 2697
Kurzmann, P. 8844
Kusano, G. 4774
Kushman, L. J. 1065
Kushnirenko, M. D. 908, 4962
Kushu, R. M. 3263
Kuss, F. R. 1753
Kust, A. F. 2142
Kusters, H. 6958
Kusumo, S. 4197, 4868, 4874, 6023, 6744
Kuszala, C. 5853
Kuszala, J. 497, 5853
Kutáček, M. 5931
Kutateladze, D. Sh. 3158, 9108
Kutlunina, N. V. 6653
Kutsenko, P. T. 5111
Kutsukov, A. S. 2513
Kutuzov, G. P. 7653
Kuvaev, V. B. 3967
Kuvshinova, E. V. 2295
Kuyan, V. G. 3399
Kuzina, G. V. 4310, 6671
Kuzina, L. V. 6575
Kuzmanov, I. 6666
Kuz'min, E. V. 5524
Kuznetsov, S. I. 1386
Kuznetsova, E. A. 6926
Kuznetsova, G. A. 9052, 9057
Kuznetsova, G. K. 7113
Kuzovkina, I. N. 193, 9052
Kuzubova, I. A. 6900
Kvantrishvili, D. G. 3110
Kvasnička, S. 4444, 4580, 6118
Kvasnikov, B. V. 7640, 8623
Kveder, S. 8731
Kvirkveliya, V. K. 3109
Kwaak, J. van der 6232
Kwack, B. H. 707, 727, 2149, 2261
Kwon, O. Y. 691
Kwong, S. S. 7473
Kyle, J. H. 645
Kyle, W. J. 2557
Kylín, A. 8308
Kywa, K. 2818
La-Anyane, S. 6392
Labanauskas, C. K. 2383, 2393, 6342, 6343, 6345, 8069, 9086
Labanauskas, C. W. 4791
Labarca, C. 2253
Laboratorium Domesticatie Paddestoelen 6120
Laborde, J. 8821
Labrador, J. R. 8746
Labus, S. 4157, 5762
Lacasse, N. L. 1210, 1211, 1680
Lachica, M. 6554, 6693
Lachover, D. 3845, 6985
Lačok, P. 5757
LaCroix, L. J. 4134
Lacy, M. L. 7822
Lado, P. 8727, 8728, 8729
Ladonin, V. F. 1902
Laetsch, W. M. 8137
Lafèche, D. 1487
Lafon, R. 585
Lagerstedt, H. B. 3338, 7437
Lagova, E. V. 2596
Lahav, E. 5603, 6385, 9131
Lahiri, B. 3226
Lai, H. 5587
Lai, M. 7794
Laiche, A. J., Jr. 3838
Laird, E. F., Jr. 2936
Laird, W. M. 6783
Laisk, A. 2025
Lake, J. V. 3296
Lakhdive, B. A. 3
Lakhidov, A. I. 1232
Lakhina, V. V. 2897
Lakshiminarayana, S. 4872
Lakshmanan, P. 447
Lakshmikantham, M. 8213
Lakshminarayana, S. 3210
Lal, B. 5926
Lal, J. 3070, 9028
Lal, N. 668, 2980
Lal, O. P. 8709
Lal, R. N. 3031
Lal, S. B. 1560, 6401, 6402, 9153
Lalatta, F. 1021, 3472, 3475
Lamb, J. G. D. 267, 6213, 7505, 8845
Lamb, K. P. 3184
Lamb, R. C. 8453
Lambert, C. 7620
Lambeth, V. N. 3792
Lamothe, M. de N. de 6398
LaMotte, C. E. 5991
Lamoureux, G. L. 1650
Lampard, J. F. 3004, 7193
Lamprecht, W. O. 8922
Lancaster, L.-A. 7227
Lanckow, J. 5923
Landa, L. 8533
Landfald, R. 6598
Landgren, B. 2738
Landis, B. J. 1216
Landsberg, J. 1708
Landsberg, J. J. 8296
Lane, R. P. 1085, 3564, 8543
Lang, A. 1339
Langcake, P. 6085
Lange, A. 1949, 2921, 3989
Lange, A. H. 452
Lange, J. H. de 1470, 4808, 8090, 9102
Lange, J. M. 921
Lange, O. L. 8426
Langerak, D. I. 7841
Langhans, R. W. 2184, 3850, 4129, 6147
Langille, A. R. 7625
Langlois, N. 770, 771
Langridge, D. F. 3496
Lanphear, F. O. 1316
Lansac, M. 3405
Laouar, S. 8985
Lapins, K. O. 1724, 2541
Lapperre, P. E. 1623
Larcher, G. 2766
Laré, M. 5599
Larios, J. F. 7718
Larrue, J. 5853
Larsen, F. E. 35, 84, 5716, 6510, 6511, 6533, 7314, 8351
Larsen, P. 5898
Larsen, P. L. 1990
Larsen, R. A. 1336, 2289, 6176
Lartaud, G. 6028
Lasareishvili, L. N. 5816
Lasheen, A. M. 1727
Láska, P. 4428
Laskowski, A., Sr. 7723
Lassoudière, A. 378
Last, F. T. 8655, 8689
Lata, P. 5471
Latche, A. 4284
Lategan, S. 8620
Laterrot, H. 2109
Latorre, B. A. 5735
Latorre, I. 4460, 6827
Lattar, F. S. 1506, 7152
Lau, I. 7989
Läuchli, A. 1673
Laughlin, C. W. 2266, 6196, 6198
Lavabre, E. M. 1571, 7190
Lavee, S. 1925, 4341, 8327, 9114
Laver, G. 3308
Lavergne, D. 8593
Lavezzi, A. 5846
Lavrichuk, I. I. 3284, 7130
Laws, G. F. 5202
Lawrence, B. M. 761, 1413, 3027, 3947, 7965
Lawrence, F. J. 8500
Lawrence, R. H., Jr. 4754, 6162
Lawson, H. M. 1057, 1981, 3661
Lazár, A. 2, 7342
Lazo, F. D. 2454
Lea, P. J. 1701
Leadley, S. 7164
Leafe, E. L. 3296
Leakey, C. L. A. 387, 2786
Leal, F. 8119
Leal, F. J. 1533
Leamon, K. C. 8531
Lear, B. 5194, 6139
Leather, G. R. 222, 448, 4481
Leather, R. I. 3187
Lebeda, A. P. 1030
Lebedev, V. M. 2573
Lebedeva, T. A. 7444
Leblond, C. 2599
Lecker, F. 1162
Leclant, F. 1022
Lecoq, J. 5601
Ledovskii, S. Ya. 254
Lee, B. W. 3992, 5554
Lee, C.-H. 4400
Lee, C. S. 7243
Lee, D. K. 533, 1059
Lee, D. S. 6522
Lee, E. K. 475
Lee, H. 6758
Lee, H. B. 6834, 8667
Lee, H. S. 1256
Lee, H. T. 3294
Lee, H. Y. 1180
Lee, K. B. 2338
Lee, K. H. 1888
Lee, K.-H. 4759, 6282
Lee, K. Y. 1108
Lee, O. H. 982, 983, 984, 1034, 1035
Lee, O. Y. 3737, 5313
Lee, P. E. 6270
Lee, P. K. 2345
Lee, S. A. 9198
Lee, S. J. 522
Lee, S. K. 2305
Lee, S. W. 2099, 2100, 2101, 2102
Lee, T. A., Jr. 6197
Lee, W. S. 1309
Lee, Y. C. 2305
Lee, Y. K. 2007
Lee, Y.-S. 4472
Leece, D. R. 32, 2612, 3469
Leeffe, J. S. 5695, 5696
Leek, A. E. 5174
Leela, D. 9129
Leete, E. 3058
Leeuw, G. T. N. De 1368
Leffring, L. 3903, 7937
Legg, J. T. 1550
Leggett, E. K. 5337
Leggett, G. E. 8290
Leggio, V. J. 3625
Legin, R. 5853
Legrand, F. 9109
Lehmann, G. 7198
Lehmann, W. 7298, 7299, 8326
Lehoczký, J. 5853
Lehtonen, K. 2041, 2042
Leibelt, W. 7091

- Leigh, D. S. 374
 Lein, K.-A. 2316
 Leiser, A. T. 2275, 2314, 8939
 Leistner, E. 5493
 Leitão Filho, H. de F. 8671
 Lekhova, E. 6605, 8421
 Lekšan, M. 3383
 Lekvinadze, P. A. 8072
 Lelacheur, K. E. 4426
 Leleji, O. I. 5978
 Lemaire, J.-M. 1170
 Lemaitre, R. 6698
 Leman, V. M. 2776, 5356, 8659
 Lemattre, M. 2939
 Lemke, G. 264, 6951
 Lemmens, J. J. 4960, 7347, 8339
 Lemmers, C. B. G. 296, 736, 7015
 Lemoine, J. 4204, 4291
 Lemon, E. 4
 Lemperle, E. 1924
 Lenartovich, V. 6606
 Lenartowicz, W. 7493, 8513
 Lenzian, K. 8910
 Lenormand, C. 2417
 Lentz, C. P. 1148, 7753
 Lenz, F. 6353
 Leon, A. 492, 6479
 León, C. 1212
 Leonard, C. D. 3119
 Leonard, N. J. 219
 Leonard, O. A. 566
 Leone, I. A. 1209
 Leopold, A. C. 194, 448, 911, 3693, 6843, 6854, 6868
 Lepesheva, R. I. 4288
 Leplya, E. S. 8005
 Leprince, J. P. 6024, 8817
 Lerman, S. L. 3710
 Lerner, H. R. 1119
 Leroux, J.-P. 1258
 Lersten, N. R. 2128
 Lesaint, C. 1988, 8308
 Lesemann, D. 7017, 7570
 Leshem, B. 7150
 Leshem, Y. 9069
 Lešínský, M. 5756
 Łeska, W. 7496
 Łęski, R. 7496
 Lester, J. N. 3667
 Leston, D. 9143
 Letan, A. 8424
 Leu, L. S. 4083, 4085, 4087, 9257
 Leu, R.-P. 2349
 Leu, R. P. 2372
 Leung, H. K. 4752
 Leuthold, L. D. 4924
 Leuty, S. J. 3379
 Lever, R. J. A. W. 1532
 Leverington, K. C. 1651
 Levi, C. 5655
 Levin, I. 1734
 Levina, M. P. 8350
 Levitskaya, L. I. 6582
 Levitt, J. 5924
 Levonen, H. J. 4618
 Levy, D. 2086, 2832, 4525
 Levy, S. 3778
 Lewak, S. 3380
 Lewin, J. 3303
 Lewis, A. J., III 2787
 Lewis, B. G. 2145
 Lewis, F. H. 1824
 Lewis, L. N. 5572
 Lewis, T. 4222
 Lewis, T. L. 5005
 Lhéralut, P. 7561
 Li, H.-L. 8957, 9015
 Li, N. 5536
 Li, S.-C. 3811
 Liacu, A. 2
 Liao, T.-H. 647
 Liau, D.-F. 2805
 Liau, T. L. 431
 Libich, V. 3960
 Libizov, N. I. 8018
 Lichadeev, G. I. 1240
 Lichev, P. 919
 Lichou, J. 5543
 Lichtenberg, V. 288
 Lichtenstein, E. P. 6863
 Licuime, M. 4460
 6827
 Lider, J. V. 7573
 Lider, L. A. 566, 8547
 Lieberman, M. 3335
 Liebert, J. 3638
 Liebl, H. 5507, 7095
 Liegel, W. 2605, 5011
 Liekens, F. 661, 662
 Lienk, S. E. 43, 4987
 Lifshitz, A. 3095
 Lifshitz, N. 3633
 Light, W. I. St. G. 4986
 Lightfoot, H. J. 3529
 Lii-Jang Liu 850, 8227, 9251
 Likens, S. T. 7996, 7998
 Lilien-Kipnis, H. 8106
 Lill, E. 7330
 Lillevik, H. A. 6018
 Lilov, D. 1097, 6716
 Lim, T. K. 6091
 Lim, T. M. 3251
 Lim, W. H. 5641, 9201
 Lima, V. de P. M. S. 8123
 Limongelli, J. C. 3728
 Lin, L. P. 7834
 Lin, N. 8818
 Lin, P.-C. 2063
 Lincoln, D. E. 1415, 6259
 Lincoln, R. E. 5428
 Lindeloof, C. P. J. van de 7524, 7525
 Lindemann, A. 4617, 7945
 Linden, R. 6698
 Linder, R. 6998
 Linderman, R. G. 2287
 Lindfors, S. 115
 Lindgren, D. L. 813, 8107
 Lindgren, J.-E. 7097
 Lindley, C. D. 8310
 Lindorf, H. 4856
 Lindquist, J. C. 4628
 Lindquist, R. K. 1292, 3809, 4576, 4577, 4712, 5253, 5913
 Lindsay, J. 4001
 Lindsog, E. 4431
 Lindstrom, R. S. 2293, 7043
 Linge Gowda, B. K. 8215
 Link, H. 484, 2602, 2603
 Linn, M. B. 6086
 Linnert, G. 2932
 Linsalata, D. 4913
 Linser, H. 2894, 6502
 Linskens, H. F. 275, 3851, 6998
 Liotta, G. 9098
 Lipari, V. 2159, 5159, 6698
 Lipe, J. A. 7465, 7466
 Lipe, W. N. 6814, 7678
 Lipecki, J. 926
 Liphschitz, N. 2369
 Lipinskii, F. B. 6947
 Lipovetskaya, O. N. 6487
 Lippert, L. F. 1202
 Lippincott, B. B. 6852
 Lippincott, J. A. 6852
 Lipps, H.-P. 1901
 Lipton, S. H. 5995
 Lipton, W. J. 622, 5167, 5915
 Lis, E. K. 8518
 Lisiecka, A. 2199
 Liška, O. 2366
 List, U. 4616
 Listopad, A. Ya 6364
 Litlere, B. 6237
 Litovchenko, E. T. 2559
 Little, C. R. 6650
 Little, R. C. 3299
 Littmann, M. D. 3177, 3179
 Littrell, R. H. 2653, 7464
 Litvinenko, R. M. 3928
 Litvinova, G. V. 1722
 Liu, C. L. 5652
 Liu, H.-Y. 9204
 Liu, L. J. 1853, 8228, 8477, 9251
 Liu, M.-C. 7253
 Liu, P. B. W. 4441
 Liu, P. S. 5712
 Liu, S. Y. 4769
 Liu, Y. T. 4087
 Liuni, C. S. 1090, 1091, 1899, 1900
 Liyanage, D. V. 8138
 Ljones, B. 2489, 6599
 Llanos Llanos, R. 8190
 Lleander, G. C. 4779
 Llorente, A. 1840
 Llorente, S. 6479
 Lloyd, A. C. 3248
 Lloyd-Jones, C. P. 8401
 Lloyd-Jones, J. G. 9014
 Loadholt, C. B. 1220, 6812
 Lobanov, G. A. 2545, 2648
 Lobanova, Z. I. 5284
 Löbenberg, L. 3165
 Locascio, S. J. 3683, 5099, 6813, 6902
 Locci, R. 474, 1518, 1580
 Lockard, R. G. 1727, 6828
 Lockhart, C. L. 109, 5695, 5811, 6685
 Lockwood, G. 5610
 Loder, J. W. 6311
 Lodhi, S. B. 8127
 Lodhi, G. P. 204
 Loebenstein, G. 3130, 3316, 3778, 3999, 5560
 Loeser, H. 4695, 4696, 5390, 6999
 Loeters, J. W. J. 2186
 Loewus, F. 2253
 Löhden, A. 3378
 Lokhman, S. A. 7498
 Lomakin, E. N. 2610
 Lomas, J. 5548
 Lomkatsi, S. 5120
 Long, A. C. 412, 413, 6437
 Long, C. E. 4924
 Long, D. 2275
 Long, J. 7712
 Long, P. G. 4834
 Loof, P. A. A. 9126
 Loomis, R. S. 4
 Loomis, W. D. 1412, 3025, 3948
 Looney, N. E. 4264, 5001
 Looy, J. Van 8802
 Lopatecki, L. E. 4285
 Lopatin, V. M. 6797
 Lopes, H. C. 4850
 Lopes, M. E. 9172
 Lopez, C. 4518
 López-Duque, S. 9167
 López, G. 4764
 López-García, J. 1593
 Lopez Neto, A. S. 5609
 Lopez Pinto, O. 8169
 López Sánchez, G. 4764
 Lorbeer, J. W. 2831, 5310, 5311, 6883, 8737
 Lord, F. T. 956, 5695
 Lord, W. J. 469, 976, 1017, 4997
 Lordello, L. G. E. 2484, 3764, 8152, 9202, 9215
 Lordello, R. R. A. 8152, 9215
 Lorentzon, K. 5428
 Lorenz, O. A. 1968, 5214
 Lorenzi, R. 3910
 Loreti, F. 503, 505, 1013, 4246, 4247, 5872
 Loria Martínez, W. 7779
 Lorrain, M. 3950
 Lorusso, A. O. 1024
 Lossois, P. 1463
 Lott, J. N. A. 1990, 8642
 Lott, W. L. 1573
 Lötter, J. de V. 2574
 Lotti, G. 2943
 Lotz, E. van der S. 3326, 7286
 Lougheed, E. C. 1783, 1801, 3009, 3813
 Loughnane, D. A. 1332
 Louguet, P. 2192, 2193
 Loureiro, M. C. 4074
 Laurence, F. J. 5354
 Lousley, J. E. 861
 Loutit, M. 617, 618
 Louvet, J. 9109
 Louw, C. W. 4089
 Louw, H. A. 8620
 Lovelidge, B. 3394, 6516
 Lovell, P. H. 153, 186, 214, 6804
 Loveys, B. R. 194
 Lowe, J. S. 4075
 Lowe, L. B. 2130
 Lower, R. L. 627, 2772, 5969, 8643
 Lowry, J. B. 4741
 Loy, J. B. 164, 4441
 Lozada V., O. 8196, 8197
 Lozhnikova, V. N. 7738
 Lozovaya, V. V. 8710
 Lubej, M. 3965
 Lubis, J. R. 4106
 Lubkowitz, J. A. 8788
 Lucchesi, A. A. 3157
 Luchkov, P. G. 3391, 4964, 4965
 Luchnikova, V. S. 1357
 Lučić, P. 6656
 Lüdders, P. 4971, 4972, 7370, 8328
 Ludlam, F. A. B. 4710, 4986, 8954
 Ludnikova, L. A. 594
 Ludwig, L. J. 3296
 Luepschen, N. S. 5780
 Lugovskaya, S. A. 7110
 Lugt, C. B. 8020
 Luh, B. S. 82, 8805
 Luhn, C. 5853
 Luis Meléndez, P. 1611
 Luisetti, J. 4277, 5040
 Luit, B. van 4382
 Luit, H. van 608
 Łukaszewicz, B. 8774
 Lukina, L. K. 6241
 Lukovnikova, G. A. 2891, 4370, 4384
 Lulle, J. 5949
 Lum, M. K. 7227
 Lumis, G. P. 5019
 Lund-Høje, K. 6848
 Lundberg, E. C. 3122
 Lundin, M. 2916
 Lundin, P. 2916
 Lundsgaard, T. 3407
 Lundstad, A. 5475
 Lung, M. 2759
 Lunt, O. R. 6479
 Luse, R. A. 1596
 Lushchuk, A. I. 1852
 Lutomski, J. 8007
 Lutz, M. 4322
 Luvisi, D. A. 2732
 Luxmoore, R. J. 3987
 Lužný, J. 2830
 Lyalin, O. O. 5224
 Lyall, L. H. 8768
 Lyaniñ, O. D. 6736
 Lyapunova, P. N. 2335, 3968
 Lyman, V. E. 2350
 Lynam, J. K. 5634
 Lynch, M. R. 3797
 Lynch, S. J. 7051
 Lynn, C. 1920
 Lyon, C. J. 2821
 Lyon, T. L. 4918
 Lyukova, L. A. 209
 Maaker, J. De 703
 Maas, E. F. 1285, 2122
 Maas, E. V. 2126, 6912
 Maas, J. G. 6220
 Maas, P. W. T. 379
 Mabbett, T. H. 5686, 9092
 Mabrouk, A. F. 7821
 Mabry, T. J. 2942, 3035, 6286
 McAleese, D. M. 6908, 6909
 MacBeath, J. H. 2641
 McBee, G. G. 2179, 5448
 McCain, A. H. 6139, 6146, 8868
 McCalley, N. F. 1158
 MacCanna, C. 8819
 MacCarter, L. E. 2001
 McCarty, C. D. 3992, 4783, 5554, 6341
 McCaskill, D. R. 595, 4355
 Macchia, V. 8598
 McClanahan, R. J. 3777
 McClish, G. A. 2461
 MacColl, D. 8261
 McConnell, D. 5416

- McConnell, D. B. 7877, 8931
 MacConnell, W. P. 4127
 McCornack, A. A. 4810, 4813, 5574, 8097
 McCoy, N. L. 2970
 McCoy, O. D. 1202
 McCoy, R. E. 1333, 4626, 4627, 5616, 7023
 McDaniel, J. C. 1396
 McDaniel, J. R. 5566
 MacDaniels, L. H. 95
 McDavid, C. R. 6011
 McDonald, J. G. 175
 McDoniel, P. B. 7101
 McDonnell, P. F. 8336
 Mace, M. E. 2120
 MacEachern, C. R. 2081
 McElroy, F. D. 532
 McElroy, F. D. 2484
 McElwee, E. W. 5388, 8851
 McEwen, F. L. 1173
 McEwen, J. 202
 McEwen, T. J. 3013
 McFadden, T. L. 4427
 McGlasson, W. B. 383, 1544, 4264
 McGlish, G. A. 2435
 McGourty, F., Jr. 4607, 7040
 McGregor, D. I. 7690
 McGregor, S. E. 7282
 McGrew, J. R. 5127
 Machado, A. A. 3183
 Machado, A. D. 4846
 Machado, C. A. 5957
 Machado, C. de A. 6417
 Machado, U. D. 4846
 Machala, M. 616, 663
 MachHardy, W. E. 4571, 4572
 Mchedlidze, G. D. 7137
 McHenry, W. B. 710
 Machida, H. 6719
 Machlis, L. 1673
 Machold, O. 2045
 Machovec, J. 2908
 Machuzhenko, V. I. 6899
 McIntyre, D. K. 7936
 McIntyre, G. I. 8698
 McKee, G. W. 7625
 McKee, M. W. 5769
 McKee, C. D. 3325, 3789
 MacKenzie, D. J. 1767
 MacKenzie, D. W. 5783
 MacKenzie, L. M. 5861
 MacKenzie, S. L. 2318
 Mackowiak, M. 6581
 MacLachlan, G. A. 2820
 McLane, S. R. 6778
 McLaughlin, J. L. 8014, 8015
 McLean, A. P. D. 4795
 Maclean, M. S. M. 2009
 McLeester, R. C. 4484
 MacLellan, C. R. 5694, 5695, 5739
 MacLeod, R. D. 3725, 3726, 5267
 McLeod, R. W. 685
 McMechan, A. D. 2584, 5694
 McMillan-Browse, P. D. A. 26
 McMillan, R. T., Jr. 2125, 3707, 5249, 5540
 McMullen, R. D. 1838
 McMurchie, E. J. 383
 McNab, J. M. 648
 McNall, L. R. 8333
 McNamara, D. G. 3551
 McNamer, A. 5991
 MacNeill, M. M. 2677
 McNulty, P. J. 3334
 MacPhee, A. W. 5695
 MacRae, E. A. 5427
 McReynolds, J. H. 6286
 McReynolds, W. D. 8769
 McRitchie, J. J. 7963
 McWha, J. A. 8609
 McWilliam, J. R. 8292
 Maczák, J. 5320
 Madan, C. L. 765
 Madan, S. K. 633
 Madan, Y. P. 851, 7247
 Mader, S. 4266
 Madhusudanan Nair, P. 6390
 Madison, J. H. 302
 Madsen, H. F. 46, 479
 Madzharova, D. 2902, 7667, 8978
 Mae, T. 5933
 Maeda, H. 2507
 Maestri, M. 3697
 Maestro Duran, R. 2427
 Magalhães, W. S. 3180
 Mâge, F. 907
 Magherini, R. 2425
 Magie, R. O. 1358, 5405
 Maginnes, E. A. 5428
 Magnifico, V. 7649
 Magnitskii, K. P. 9083
 Magnus, V. 8731
 Magriso, Yu. 2714, 6749
 Magyarosy, A. 2774
 Mahadeva, K. 6465
 Mahadevan, S. 6255
 Mahajan, P. N. 6101
 Maharana, T. 2926
 Mahato, S. B. 6300
 Maher, M. J. 240, 1284, 4535, 7786
 Mahmood, K. 6006
 Mahmood, T. 2411
 Mai, W. F. 1105, 1149, 657Q
 Maienthal, E. J. 2496
 Maier, J. 340, 7087, 7095
 Maier, S. 865
 Maier, V. P. 5576, 6367, 8108
 Maing, I.-Y. 5902
 Maini, P. 2506, 4142
 Mainland, C. M. 3531
 Maire, R. 1326
 Maire, R. G. 2275, 2288
 Maiti, R. C. 7746
 Maiti, S. C. 3235, 3236
 Maiti, S. K. 3235
 Maiti, S. N. 5334
 Majak, W. 8999
 Majer, J. D. 6394
 Maji, P. N. 8032
 Majorana, G. 4796, 6248
 Majstorović, G. 3490, 6663
 Majumdar, S. P. 9050
 Majumder, P. K. 3210, 3217, 3221, 3223, 3230, 3231
 Majumder, S. K. 1534, 8156, 8157
 Makanjuola, G. A. 1184
 Makariev, Z. 8421
 Makarov, A. A. 4181
 Makarova, A. I. 4186
 Makarova, G. M. 949, 4947, 7569
 Makarski, J. S. 6565
 Makasheva, R. Kh. 6001
 Makepeace, R. J. 7277
 Makhalova, M. R. 672
 Makhlaeva, R. F. 6870
 Makiguchi, M. 8650
 Makkink, G. F. 2793
 Makosz, E. 8346
 Makovec, K. 1420, 1421, 6280
 Maksimov, G. I. 571
 Maksimova, T. N. 5699
 Makus, D. J. 7517
 Malaguti, G. 3775, 8076
 Malavolta, E. 864, 3197, 6479, 7703, 8671
 Malawi, Department of Agriculture 8580, 9119
 Malawi, Tea Research Foundation of Central Africa 1660, 6454, 6455
 Malaya, Rubber Research Institute 3252, 3253, 7221, 7222, 8176, 8177, 8178, 8185
 Malaya, University of Malaya Faculty of Agriculture 5669
 Malcolm, H. D. R. 1820, 5033
 Malcolm, J. L. 1594
 Malcoste, R. 2766, 3861, 5208
 Maleki, Z. 6203
 Malenin, I. 5856, 5857, 8557
 Malfa, G. La 2159, 5159
 Malherbe, N. 5342
 Malhotra, S. 4573, 6106
 Malhotra, S. K. 656
 Malhotra, S. S. 656
 Malik, C. P. 2213
 Malik, M. M. S. 1610
 Malik, M. Y. 6292
 Malik, R. S. 8613
 Malik, S. 5514
 Malik, S. N. 6292
 Malinina, M. I. 4462
 Malinskaya, S. M. 1229
 Malishevskaya, M. F. 6534
 Maliwal, G. L. 2838, 3773
 Malkomes, H.-P. 1953, 5394
 Mallikarjuniah, R. R. 6993, 8966
 Malo, E. 3213
 Malo, S. E. 5604, 6409, 8054, 8057
 Maltabar, L. 8533
 Malý, I. 2852
 Malyshev, A. A. 6305
 Malyutin, N. I. 1345
 Malzer, G. L. 4561
 Mamaev, S. A. 2998
 Mamarov, P. 1079, 2726, 8537
 Mammaev, A. T. 2728
 Mamulashvili, G. G. 5224
 Manaenkov, A. N. 3430
 Manaenkova, N. I. 2673, 2674
 Manago, M. 3149
 Manalo, J. A. 1595
 Manalo, J. R. 639, 3646
 Manchanda, H. R. 7138, 9087
 Manciot, R. 9151
 Mandahar, C. L. 1259, 3684
 Mandal, D. P. 5677
 Mandi, J. W. 3272
 Mandrau, J.-L. 576
 Mandrik, V. Yu. 5083, 8933
 Mándy, G. 5947
 Maness, E. P. 1065
 Mani, E. 1766
 Manica, I. 1009, 1613
 Manipura, W. B. 8269, 9270
 Manitto, P. 5901
 Manjam, E. 3778
 Manji, B. T. 5022
 Man'ko, V. V. 7569
 Mann, H. S. 8777
 Mann, J. 760
 Mann, N. S. 7250
 Manner, R. 6191
 Manners, C. J. 12
 Manning, W. J. 3904, 3916, 4392, 6839, 6840, 7772, 7864
 Manninger, E. 5850
 Manoukas, A. G. 9115
 Manov, S. 7366
 Mante, W. 6473
 Mantell, S. H. 7013
 Mantinger, H. 464, 6560
 Manughevi, E. 7343
 Manuhev, B. 3453
 Manwani, A. H. 7311
 Manzo, P. 3480, 3566
 Marais, J. P. 8286
 Marais, P. G. 120, 145, 8619
 Maraite, H. 4928, 5953
 Maramorosch, K. 833, 1373, 3188, 7241
 Marangoni, B. 1846, 5029
 Marani, F. 1331
 Marble, P. M. 6259
 Marcellin, P. 5747
 Marchal, J. 825, 1524, 1667, 5539
 Marchand, D. 6028
 Marchesi, G. 6056
 Marchesini, A. 3064, 5901
 Marchetti, L. 6704
 Marchoux, G. 6608
 Marciani Magno, S. 9055
 Mareček, J. 2908
 Marei, N. 1008, 3455
 Marénaud, C. 510, 1808, 3405
 Marenkov, V. S. 8508
 Maretzki, A. 2476
 Margara, J. 8602
 Margolin, A. F. 4211
 Margraf, K. 7389
 Margulies, M. M. 184
 Mariakulandai, A. 4090, 8215
 Mariau, D. 4877, 5638, 9155, 9188
 Mariconi, F. A. M. 7768, 8080
 Marieva, G. M. 3590
 Mariëva, G. M. 8539
 Marinescu, V. G. 7554
 Marini-Bettolo, G. B. 6317
 Marinis, A. De 6380
 Marinov, I. 6493
 Marinov, S. 1104
 Mariotti, A. 5098
 Mariotti, J. A. 8190, 9225
 Markakis, P. 8806
 Markin, B. T. 5357, 6102
 Markin, M. I. 5848
 Markkula, M. 1193
 Markose, V. C. 8186
 Markov, I. E. 7356
 Markov, Yu. a. 2526
 Markova, M. 6895, 6896
 Marks, C. F. 7452
 Márkus, F. 5321
 Marlatt, R. B. 2270, 5452, 5454
 Marletta, G. P. 5837
 Marocchi, G. 5270
 Marousky, F. J. 1327, 6976, 7006, 7901, 8866
 Marozzi, N. Q. 1137
 Marquis, V. O. 3066
 Marr, C. 641
 Marré, E. 8727, 8728, 8729
 Marriage, P. B. 1819
 Marrou, J. 2119, 5348
 Marsbergen, W. Van 2992
 Marschner, H. 8308
 Marseault, J. 4038
 Marsh, A. W. 2376
 Marsh, H. V., Jr. 6020
 Marsh, R. W. 4927
 Marshall, C. 6011
 Marshall, D. 221
 Marshall, H. H. 4745
 Marston, M. E. 2230
 Marte, M. 3708, 3805, 4476
 Martel, P. 8742
 Martens, P. 7634
 Martens, P. H. 7609, 7610, 8590
 Martin, C. 6814, 7678
 Martin, C. E. 4540
 Martin, D. 5005
 Martin, E. 1553
 Martin, E. C. 1200, 7282
 Martin, E. S. 5417
 Martin, F. A. 188
 Martin, F. G. 7946, 9103
 Martin, F. W. 5522
 Martin, G. 1597, 1599, 1600, 4070, 7208
 Martin, G. C. 2637, 3483, 4280, 5042, 8469, 8470
 Martin, G. O. 8502
 Martin, J. A. 1967, 5400
 Martin, J. H. 4408
 Martin, J. P. 2458, 6413, 8055
 Martin, M. W. 2871
 Martín Molino, I. del 6702
 Martin, P. E. 2424, 4167, 6355
 Martin-Prével, P. 825, 864, 5539
 Martin, R. O. 5287
 Martin, R. V. 4252
 Martin, S. 2145
 Martinek, V. 2366
 Martinez, A. A. 9215
 Martinez, A. L. 2386, 2390
 Martínez B., H. H. 7181
 Martínez-Corbalán, A. 864
 Martinez, H. 6755
 Martinez, R. R. 8603
 Martino, E. di 5578
 Martins, A. L. 3584
 Martins, P. S. 8934
 Martinson, V. 4842
 Martinson, V. A. 4838
 Martirosyan, E. L. 7547
 Martsenyuk, V. 7487
 Martyr, R. F. 4612
 Maruff, A. P. 9269
 Martutan, S. A. 1123, 1927
 Marval, P. 7992
 Marvasi, C. 6704
 Marwitz, R. 832
 Marx, G. A. 2817
 Mašek, V. 3421

- Masera, O. 7358
 Mashanov, V. I. 4740
 Mashchenko, N. D. 1923
 Mashev, N. P. 684, 6803
 Mashkova, E. P. 5700, 5701
 Mashkovich, I. K. 7664
 Maslekar, S. R. 5301
 Maslov, S. P. 5699, 8374
 Mason, D. T. 5089
 Mason, E. C. 8820
 Mason, G. 4329
 Mason, H. C. 5335
 Mason, J. F. 1292
 Mason, J. L. 3431
 Masoner, M. 3021
 Masry, S. El 6301, 6302
 Massey, L. M., Jr. 4583
 Massfeller, D. 3672
 Mastalerz, J. W. 6983
 Masuda, Y. 138, 2822, 8599
 Masui, M. 1998
 Mata, N. R. H. 8647
 Matamoras Ramirez, F. 5635
 Mateeva, D. P. 3026
 Matelli, G. P. 5853
 Matev, I. 6108
 Matev, T. 6070
 Matevska, M. 5109
 Matevska, N. 1084, 2712, 7552
 Mathai, C. K. 1535
 Máthé, I. 7114
 Máthé, I., Jr. 7114
 Mathen, K. 9159
 Mathenge, W. M. 1584
 Matherne, R. J. 4883, 9231, 9239
 Mathes, T. D. 1565
 Mathew, C. 4052
 Mathew, J. 7145
 Mathew, P. K. 835, 9164, 9165
 Mathews, B. L. 7302
 Mathews, C. 9165
 Mathews, I. 3988
 Mathis, P. 7708
 Mathis, V. 8953
 Mathur, B. K. 848
 Mathur, B. S. 9267
 Mathur, D. D. 4249
 Mathur, D. L. 7694
 Mathur, J. R. 8011
 Mathur, M. M. 8743
 Mathur, R. K. 3030
 Mathur, T. 8657
 Matoba, F. 622, 6790
 Matos, N. 9172
 Matrenina, R. M. 8965
 Mats, M. N. 783
 Matsubara, H. 7001
 Matsuda, K. 5460
 Matsui, C. 2388
 Matsui, T. 6825
 Matsumoti, K. 5577
 Matsuo, E. 8660
 Matsushita, K. 5983
 Matta, A. 6084
 Matthee, F. N. 5060, 5130, 5733, 7576
 Matthew, J. 1567
 Matthews, S. 6871
 Mattick, L. R. 1127
 Mattoo, A. K. 3210
 Mattos, J. R. 2238
 Mattos, J. R. de 4708
 Mattson, R. H. 2952
 Matuo, T. 2057
 Matusiowicz, E. 7080
 Matveenko, L. F. 5534
 Matveeva, R. F. 5723
 Mátyus, M. 246
 Maugenet, J. 5065
 Maul, O. 245
 Maurer, A. R. 8500
 Maurer, K. J. 1047, 4966
 Mavi, G. S. 2473
 Maw, G. A. 2135, 2755, 7798, 8789
 Mawick, J. 8945
 Maxie, E. C. 1462
 Maximos, S. 1479
 Maxon Smith, J. W. 3642
 Maxwell, N. P. 9089
 May, D. 8614
 May, J. 8388, 8390
 May, P. 552, 6765
 Mayak, S. 2297, 3922
 Mayer, A. M. 1119
 Mayer, W. 5989
 Maynard, D. N. 606, 632, 1063, 1950, 1957, 3912, 4424, 8949
 Maynhardt, J. T. 7478
 Mazanashvili, T. G. 5758
 Mazela, A. 663
 Mazhorov, E. V. 5721
 Mazomenos, B. 9115
 Mazuelos, C. 8112
 Mazurczyk, W. 151
 Mazurenko, M. T. 5483
 Mazza, C. A. 4518
 Mazzucchi, U. 1190, 3664, 4454, 4625
 Meade, N. 2854
 Measures, M. 7689
 Medcalf, J. C. 4065
 Medin, A. 3447, 3456
 Medina Acevedo, J. C. 4764
 Medina, C. 4789
 Medina, J. C. 4764, 8671
 Medrano, C. 8173
 Medrano, C. E. 7992, 8141
 Medvedev, B. N. 1996
 Medvedev, V. V. 8288
 Medvedeva, T. N. 908
 Mee, G. W. P. 403
 Mee, J. M. L. 3258
 Meehan, C. N. 4183
 Meeldijk, B. P. 4434
 Meenakshi, G. 2807
 Meer, F. A. van der 6564
 Meeteren, U. van 719
 Meeuwse, P. 8416
 Meeyot, W. 4682
 Meggitt, W. F. 5445, 5446, 8684
 Mehendale, H. M. 2033
 Mehlis, E. 7895
 Mehliquist, G. A. L. 7040
 Mehrotra, N. K. 7550
 Mehrotra, O. N. 7758
 Mehta, K. G. 8266
 Mehta, S. S. 7670
 Mchta, U. 7879
 Mehwald, J. 1243, 6837
 Meidner, H. 5417
 Meier, H. 3053
 Meijaard, D. 6775
 Meijis, M. Q. Van der 2186
 Meinwald, J. 5415
 Meister, A. 5411
 Meister, H. 5221
 Meith, H. C. 4167
 Mekhandzhiev, A. D. 3026
 Melamed-Madjar, V. 3808
 Melekhov, E. I. 5984
 Meleshko, V. O. 6721
 Melet, D. 4398
 Meli, T. 5059
 Melichar, F. 8455
 Melin, P. 824, 825, 4038, 5602, 6387, 9133
 Melkonyan, A. S. 5842
 Mel'kumova, Z. 8542
 Mellenthin, W. M. 906, 1841, 1842, 5791, 6648
 Mello Filho, A. de T. 3764
 Mel'nikov, V. E. 1272, 1276
 Mel'nikova, L. M. 8899
 Melo, J. de S. 417, 428, 6432, 6433
 Melouk, H. A. 759
 Menary, R. C. 3247
 Mence, M. J. 1230
 Mendel, K. 9080
 Mendes, O. 2385
 Mendham, N. J. 7206, 7207, 7209, 7210, 7211, 7214
 Mendicino, J. 2044
 Mendilcioglu, K. 8323
 Mendiondo, M. E. 2348
 Mendonça, A. de 5853
 Mendonça, M. de 4889
 Mendoza, J. A. 7992, 8141
 Mendoza, L. A. 7077
 Mendoza P., V. 8459
 Meneve, I. 4689
 Menezes Sobrinho, J. A. De 227
 Mengel, K. 128, 1295
 Menon, K. S. 7188
 Menon, M. A. 7216
 Menon, T. C. M. 361
 Menshawi, Z. A. 8210, 8250
 Menzel, K. 4652, 5421, 6169, 6170, 6171
 Merényi, K. 7508
 Merkel, D. 7789
 Merkel, K. E. 4909, 4910
 Merkle, M. G. 5226
 Merlini, L. 6245
 Merlo, P. A. 4628
 Mertens, T. R. 140
 Mertensen, M. A. 6264
 Mertia, N. S. 1273
 Merwe, J. J. H. van der 5130, 7318, 7576
 Meshcheryakov, A. M. 3580
 Meshcheryuk, G. I. 763
 Mesnier, Y. 5065
 Mespel, G. J. van der 473
 Mespel, G. J. van der 4302
 Mesquita, A. 3192
 Mesquitela, J. C. 9172
 Messenger, P. S. 2501
 Messiaen, C. M. 4539, 4568, 5294, 5329, 6836, 7823
 Messing, J. H. L. 3299
 Mester, I. M. 5122, 5123
 Mestres, R. 3327
 Metcalfe, E. D. 6136
 Meteiko, T. Ya. 6098
 Méthy, M. 6485
 Metlitskii, Z. A. 7363, 8366, 8367
 Metz, J. 4131
 Metz, K. 4411
 Metzger, B. 2181, 7950
 Metzner, R. 1859
 Meuldermans, W. 3653, 3758
 Mexico, Centro de Investigaciones Agrícolas del Noreste 5794
 Meyer, F. G. 1385
 Meyer, J. 85, 1884, 4274, 5784
 Meyer, J. A. 864
 Meyer, J. H. 409
 Meyer, J. P. 6386
 Meyer, M. M., Jr. 2917
 Meyer, R. H. 3411
 Mhedhbi, A. 4369, 4587
 Miana, G. A. 1402, 5480
 Miao, Y. L. 7828
 Michael, A. H. 2922
 Michael, I. F. 1514
 Michail, S. H. 4456
 Michalkiewicz, D. M. 2326
 Michel, F. 6021
 Michele, A. De 817, 818
 Michelson, L. F. 4127
 Michl, J. 8455
 Micke, W. C. 3450, 4167
 Mickelsen, O. 6018
 Middeltem, C. H. Van 8627
 Miflin, B. J. 217, 2748
 Migliori, A. 2119, 5348
 Mignucci, J. 850, 8228
 Mihaela, A. 6294
 Miham, P. E. 752
 Mihashi, K. 3005
 Mihashi, S. 3068
 Mihov, A. 3620
 Miidla, Kh. I. 51
 Mijajicka, M. 6630
 Mijailova, P. T. 6400
 Mijušković, M. 6982
 Mika, A. 7395, 7402, 8362
 Mikaelyan, L. N. 5336, 5487
 Mikeladze, E. G. 6750
 Mikhailov, Ts. 5722
 Mikhailova, G. D. 924
 Mikhailova, S. 6749
 Mikhailova, V. P. 1457
 Mikhaleva, G. V. 7532, 8511
 Mikheeva, M. V. 5699
 Mikhno, A. N. 2051
 Mikhov, A. 3620, 3621
 Mikkilä, T. 5413
 Mikolajczak, K. L. 4761
 Miksche, J. P. 331, 3010
 Mikuckis, F. 2632
 Milaire, H. G. 912
 Milanov, B. 6873, 7366, 8421
 Milbocker, D. C. 4691, 4697, 6216
 Milborrow, B. V. 3718
 Milbrath, J. A. 7475
 Miles, N. W. 4924
 Miletić, R. 2520
 Milheiro, A. V. 2381
 Milholland, R. D. 1868
 Miljković, I. 7457
 Millar, A. A. 3713, 7582
 Miller, C. H. 627, 5209, 5969
 Miller, D. E. 181
 Miller, G. E., Jr. 3048
 Miller, J. 2312
 Miller, J. D. 8254
 Miller, J. W. 1559
 Miller, M. 5549, 5550
 Miller, M. P. 4001
 Miller, P. M. 6569, 7300, 7380
 Miller, R. 7995
 Miller, R. A. 1306, 4590
 Miller, R. E. 3825
 Miller, R. J. 6307
 Miller, S. L. 286
 Miller, T. D. 5787
 Millhollon, R. W. 4883, 8204, 9239
 Millier, W. F. 54
 Millikan, D. F. 67, 96, 6707, 7381, 8402
 Millim, K. 5706, 8413, 8471
 Mills, G. A. 1474
 Mills, H. H. 525, 5020, 8432
 Milne, D. L. 6373, 7168
 Milovančić, M. 2629, 2652
 Milovanović, S. 2522
 Milstead, J. E. 4955
 Mimaud, J. 4138, 5680
 Miminoshvili, P. B. 3159
 Mimura, L. 6447
 Minelli, A. 5771
 Minco, A. 9098
 Mineo, G. 9098
 Ming-shu Ho 8833
 Minh, T. V. 2646
 Minina, S. A. 8039
 Mininberg, S. Ya. 5138
 Ministry of Agriculture for Northern Ireland 4123
 Mink, G. I. 5709
 Minker, E. 4775, 9038, 9056
 Min'kov, B. P. 6267
 Minkov, I. 3651, 6876
 Minnaar, J. 4700, 6222
 Minocha, S. C. 3631
 Minoiu, N. 8389, 8474
 Mir, I. 8036
 Miranda Filho, J. B. 6934
 Miraschiv, B. 1907
 Mircea, I. 5706, 7307, 7426
 Mircetich, S. M. 511, 5768, 6633
 Miremedi, A. 810
 Mirică, A. 8482
 Mirică, I. 8482
 Mirocha, C. J. 4928
 Miroslov, E. A. 354
 Mirpazayov, Kh. 1304
 Mirzaev, M. N. 2728
 Mirzaev, Yu. 5068
 Mirzoyan, A. T. 9276
 Misaka, K. 3324
 Mišev, A. 2520
 Mishanec, W. 2817
 Mishra, D. 6093
 Mishra, H. R. 143, 1011
 Mishra, K. A. 493
 Mishra, K. C. 846, 7232
 Mishra, M. D. 3086
 Mishra, R. R. 8772
 Mishulina, I. A. 5481, 5482
 Mishurenko, A. G. 3568
 Mišić, P. D. 2519, 3377, 3382, 3505, 3537, 4177
 Miškov, O. 6544
 Mišković, R. 6700
 Misra, A. 6894
 Misra, A. K. 8942
 Misra, G. 8969, 9017

- Misra, R. S. 2482, 9284
 Misra, S. K. 8266
 Misra, S. S. 852
 Mital, S. P. 8998
 Mitchell, A. F. 7034, 7035
 Mitchell, C. B. 6778
 Mitchell, E. D. 3028
 Mitchell, E. K. 2795, 3714
 Mitchell, F. G. 3450
 Mitchell, J. E. 211, 1231
 Mitchell, J. W. 2801, 3720
 Mitchell, R. C. 5181
 Mitchell, R. E. 7833
 Mitchell, W. C. 5451, 5653
 Mitov, P. 4255, 4967
 Mitra, A. R. 8032
 Mitra, C. R. 9017
 Mitra, G. C. 6287, 8087
 Mitrakos, K. 5687
 Mitrokhin, A. N. 8653
 Mitscher, L. A. 2349, 2370, 2372
 Mitsuhashi, H. 3057
 Mitsuro, I. 7904
 Mittler, T. E. 7282
 Mitu, M. 2
 Miura, Y. 2938
 Miyagawa, H. 5959
 Miyakawa, T. 2388
 Miyamoto, J. 6758
 Miyasaka, S. 8671
 Mizrahi, I. 7077
 Mizrahi, Y. 2553
 Mizuno, N. 2577, 2730
 Mizuno, S. 7153
 Mkervali, V. G. 4897
 Moberg, E. L. 3893
 Moberly, P. K. 414, 1626, 7257, 9230
 Mochalkin, A. I. 21, 1241
 Mohchizuki, H. 2111, 2859
 Mock, T. 1326, 3007, 7847
 Modi, V. V. 3210
 Modic, D. 6536
 Modlibowska, I. 1781
 Modrić, I. 3384
 Moe, R. 6230, 7908
 Moffa, A. 562
 Moffitt, H. R. 987
 Moffitt, S. 225
 Moghazy Shoaib, A. M. El 3079
 Moh, C. C. 636
 Mohácsy, K. 6720
 Mohammed bin Mohammed Ali 3663
 Mohan Ram, H. Y. 3056, 7879
 Mohanasundaram, M. 381
 Mohapatra, A. R. 3176
 Mohr, H. 3012, 3021, 7305
 Mohr, H. C. 1993
 Mohsenin, N. N. 980
 Mohsin, M. 2031
 Moilliet, T. K. 957
 Moïnova, E. G. 3026
 Moïnova, K. 8594
 Mojica, M. L. 3699
 Mok, C. K. 3244
 Mokrá, V. 7910
 Mokrzecka, E. 126
 Mol, C. P. 2268
 Mola, J. L. 8041
 Molan, V. 6490
 Molchanov, E. F. 453, 496, 1741, 3404, 7327, 8435
 Molina, R. 6911
 Moline, H. E. 5991
 Mollenhauer, H. H. 6856
 Moller, W. J. 7451
 Möllhoff, E. 4143
 Molnár, J. 5732
 Molnar, J. M. 2290
 Molokhova, L. G. 8023
 Molot, P. 6698
 Monache, F. Delle 772
 Monaco, T. J. 627, 2237, 5209, 6068
 Monastera, F. 27, 3491
 Monasteryetskaya, E. V. 6098
 Mondeshka, P. 7467
 Mondeshky, L. M. 4432
 Mongelard, J. C. 2468, 4100, 6447, 8203, 8249
 Monin, A. 4232
 Monina, O. I. 8018
 Monreal, K. 1917, 1918
 Monselise, S. P. 368, 4005, 4014, 4807, 7149, 8083, 8089
 Montag, A. 3801, 3993
 Montagut, G. 787, 5539
 Montalbini, P. 3708, 4476, 5771
 Montaldi, E. R. 4397
 Montalvo-Zapata, R. 6449, 8251
 Monteiro, A. R. 9202
 Monteith, J. L. 4
 Montes, M. 8991
 Montgomery, H. B. S. 7320
 Montgomery, I. G. 1074
 Montoya Maquin, J. M. 4047
 Monzada, H. 820
 Monzón P., D. 7695
 Mooi, J. 7845
 Mookken, J. D. 773, 9048
 Mookherjee, B. D. 7987
 Moon, R. E. 1334, 8841
 Moore, E. L. 675
 Moore, F. D. 4413
 Moore, J. N. 537, 2709
 Moore, K. G. 153, 186, 6804
 Moore, L. D. 740
 Moore, P. H. 1646, 2465
 Moore, P. W. 4787
 Moore, R. 6569
 Moore, R. K. 4601, 6956
 Moorthy, N. V. N. 3210, 4872, 7205
 Mor, I. 3311
 Moraes, F. R. P. de 3199
 Moraes, G. H. K. De 1303
 Morales Abanto, A. 7167
 Morales, C. 4465
 Moran, V. C. 5566
 Moravec, I. 5881
 Moravec, J. 4444, 4580, 6118
 Moravets, I. 5881
 Morchiladze, Z. N. 4903
 Moreau, B. 7174
 Moreau, C. 1388
 Moreau, J.-P. 762
 Moreau, M. 1388
 Morehead, G. W. 1761
 Moreira, C. S. 3157
 Morel, G. 7102
 Moreno, D. S. 5565
 Morettini, A. 516, 2419, 3164, 3167
 Morgan, B. J. W. 4612
 Morgan, E. D. 4751
 Morgan, J. V. 7781
 Morgan, M. 7229
 Morgan, N. G. 2504
 Morgan, P. W. 5688, 7465, 7466
 Morgat, F. 4227
 Mori, P. 2600
 Mori, Y. 5983
 Morin, C. W. 5587
 Morin, D. M. 5656
 Morin, J. P. 5638
 Morini, S. 83
 Morisset, C. 6930
 Morkel, W. van der B. 3308
 Moroshan, E. A. 1092
 Morozova, T. V. 2623
 Morré, D. J. 2951
 Morrell, G. 1782
 Morris, B. 8917
 Morris, D. A. 216, 5279
 Morris, J. L. 4372
 Morris, J. R. 595, 4355
 Morris, K. P., Jr. 4718
 Morris, L. G. 7295
 Morris, W. C. 4691, 6216
 Morrison, F. D. 4924
 Morrison, L. S. 5463
 Morrison, R. D. 1334, 8841
 Morrison, R. H. 2287
 Mortensen, M. A. 6265
 Mortier, F. 3949
 Mortimer, M. J. 7924
 Morton, J. F. 5944, 9145
 Morton, J. K. 761, 1413
 Morvan, G. 6608
 Mosandl, A. 1128
 Mosconi, R. 1117
 Moser, E. 7502
 Moshkov, B. S. 2881, 7806
 Moshonas, M. G. 2412, 4023
 Moskalenko, K. M. 6615, 6618
 Moskaleva, G. I. 5917
 Moss, D. N. 3, 3256
 Moss, G. I. 805, 1501, 4793, 6357
 Mossadeghi, N. 1989, 3934
 Mosse, B. 6880
 Mostafa, M. B. 2231, 2240
 Mostolovitsa, K. Yu. 4290
 Mota, M. I. 7184
 Moti 2731
 Motial, V. S. 352
 Moţoi, E. 8474
 Motomura, Y. 7589
 Motoyama, E. 5567, 5568, 8086
 Mott, R. L. 6110, 6111, 6112
 Motuzova, G. V. 3120
 Mouries, C. 9065
 Moursi, M. A. 8042, 8043
 Moussa, F. 7800
 Moussa, F. F. 4581
 Mousset 4027
 Mouzin, T. E. 3477
 Movchan, V. G. 1912
 Mowat, W. P. 5437
 Mowry, J. B. 3374
 Moy, J. H. 2435, 2461
 Moyer, J. C. 1127
 Mrozek, R. F. 55
 Mrozowski, M. 7362
 Mudd, J. B. 9072
 Mueller, R. T. 1480
 Mughogho, L. K. 2011, 2014, 5973, 5975
 Mugwira, L. M. 2019
 Mukerji, K. G. 2849
 Mukewar, P. M. 2601
 Mukhamedov, L. R. 1183
 Mukhanin, V. G. 2588
 Mukherjee, B. 1436
 Mukherjee, D. P. 9125
 Mukherjee, I. 3770
 Mukherjee, K. 8013
 Mukherjee, S. K. 3210, 3215, 3217, 3220, 3221, 3223, 7545, 8321
 Mukherji, D. K. 7068
 Mukherji, S. 2754
 Mukhin, E. N. 3689
 Mukhopadhyay, A. N. 2319
 Mukhortova, T. G. 4740
 Mulas, G. 3729
 Mulder, D. 3325
 Mulder, De 4110, 4111
 Mulder, N. J. 8163, 8171
 Mulinge, S. K. 3202, 3205
 Mulkey, W. A. 620, 4439
 Müller, E. 6622
 Müller, E. W. 4415
 Müller, F. 2497
 Müller, G. J. 6086
 Müller, G. W. 4797
 Müller, H. 5198
 Müller, H. J. 1419, 1746
 Müller, H. M. 5164, 5410
 Müller, H. W. K. 3550, 7540
 Müller, L. 7167
 Müller, L. E. 1588
 Muller, P. J. 290, 2947, 2956, 2957, 7007, 8905
 Muller-Stock, A. 6049
 Müller, W. 1738
 Multamäki, K. 7019
 Mumford, L. M. 1237
 Muminov, T. G. 6809
 Mun, H. T. 4076
 Mun Hwang Ting 4076
 Munier, p. 6370
 Munk, W. J. de 3880
 Munk, W. J. de 6185, 7909
 Munnecke, D. E. 1020, 3316
 Munoz, F. 5403
 Muñoz S., C. 3471
 Munro, H. E. 2104
 Munro, O. D. 6729
 Munshi, S. K. 7161, 7162
 Munson, S. T. 8669
 Murai, N. T. 7768, 8080
 Murail, M. C. 1511
 Murakami, H. 8126
 Murakami, Y. 7869
 Muranishi, S. 8574
 Murant, A. F. 4317
 Murashige, T. 731, 794
 Murata, T. 9105
 Murata, Y. 4
 Muratović, A. 2607, 6613
 Muratović, S. 6660
 Murav'ev, A. A. 8366, 8367
 Murav'ev, I. A. 6299
 Murav'ev, Yu. N. 2617
 Murawski, H. 923
 Murdoch, C. L. 5451
 Murdoch, D. I. 6363
 Muromtsev, I. A. 2552
 Murozono, M. 6826
 Murphy, E. F. 8499
 Murray, D. R. 6850
 Murray, J. S. 7035
 Murray, K. E. 4826
 Murray, M. G. 226
 Murray, M. J. 1415, 3945, 6259, 9000
 Murray, S. A. 3820
 Murtazov, T. 441, 4379, 4536, 4547, 4555, 5333, 6494, 7682, 8303, 8767, 8771
 Murthy, K. N. 3176
 Murthy, K. S. 7078
 Murthy, N. S. N. 392
 Murti, V. V. S. 758, 3069
 Murty, A. S. 8874
 Musard, M. 2118, 5348
 Musch, A. 7880
 Muse, B. D. 740
 Muse, R. R. 740, 5450
 Muschold, J. 8801
 Musgrave, R. B. 3
 Musich, N. I. 8485
 Musich, V. N. 8485
 Musiyaka, V. K. 2051
 Müssel, H. 4669
 Mustafce, T. P. 4455
 Mustard, M. J. 7051
 Musumeci, M. R. 4473
 Mutch, W. E. S. 7035
 Muthappa, B. N. 8149, 8150
 Muthukrishnan, C. R. 3578, 9177
 Muthukrishnan, T. S. 7762
 Muthuswamy, S. 3210, 3240, 4044, 4871, 6443, 9227
 Mutsenietse, D. Kh. 6853
 Mutser, P. 698
 Muzacz, R. S. 1333
 Muzychenko, P. I. 1109
 Myburgh, A. C. 4950
 Myburgh, J. 232
 Myers, J. M. 1659
 Mytsyk, L. P. 5447
 Nabawy, S. M. El 2414, 2439, 2440
 Nabawy, S. M. El 2438
 Nadezhina, T. P. 4768
 Naef-Roth, S. 2055
 Nag, K. C. 3038, 7086
 Nag, T. N. 1433, 1439
 Nagai, Y. 1999
 Nagalakshmi, S. 332
 Nagao, M. 8886
 Nagappan, K. 5223
 Nagar, P. K. 9175
 Nagarajan, K. 6818
 Nagarajan, M. 4853
 Nagarajan, S. 6239
 Nagasampagi, B. A. 9039
 Nagasawa, K. 3145, 3168
 Nagel, C. W. 557, 597, 1081
 Nagell, A. 3032
 Naggar, S. El 1479
 Nagl, W. 2087, 2798
 Nägler, M. 8482
 Nagy, A. 5086
 Nagy, F. 6261
 Nagy, K. A. 7935
 Nagy, L. S. 6766
 Nagy, R. 5850

- Nagy, S. 1497, 1498, 3156, 8100
- Nahlawi, N. 1850, 5061
- Nahrstedt, A. 2626
- Naidenova, I. N. 5825
- Naidina, L. 8533
- Nainawatee, H. S. 3336
- Nair, A. G. R. 2341, 3035, 4771, 6304, 9285
- Nair, K. R. 1641
- Nair, M. G. 8031
- Nair, N. G. 2905, 3828, 7832
- Nair, P. K. B. 7940
- Nair, P. M. 6390
- Nair, R. B. 7172
- Naithani, S. P. 8253
- Naito, R. 6620
- Naka, J. 6000
- Nakagawa, H. 5366
- Nakagawa, S. 5043
- Nakajima, T. 3107
- Nakamura, H. 1698, 2704, 2851, 3329, 4546, 4900, 4936
- Nakamura, S. 2307
- Nakanishi, J. 4799
- Nakano, M. 218
- Nakano, O. 3757, 5957, 6417
- Nakasone, H. Y. 3175, 9191
- Nakayama, A. 432, 4112
- Nakayama, K. 3321
- Nakayama, M. 3022
- Nakov, B. 8622
- Nalbandyan, R. A. 5863
- Naletov, B. G. 5190
- Nambiar, K. P. P. 831, 1556
- Nambiar, M. C. 7968
- Nambiar, P. K. V. 7072, 7978
- Namekata, T. 2056
- Nance, J. F. 7735, 8730
- Nand, D. 559, 568, 9283
- Nanda, K. K. 2930, 4632, 5455, 7883, 7884
- Nandpuri, K. S. 235, 677, 7075, 7982, 8664
- Nangia, R. P. 589, 590
- Nanney, J. 8866
- Nansen, P. 3898
- Napitupulu, L. 9206
- Nara, J. 5663, 8273, 8274
- Narang, R. S. 8741
- Narasimha Rao, G. 8213
- Narasimha Rao, P. V. 8213
- Narasimhan, K. S. 8156, 8157
- Narasimharao, B. G. V. 6256
- Narayana, M. R. 1418
- Narayana Moorthy, N. V. 4872
- Narayanan, R. 3251, 6420, 6426
- Narayanan, V. 4717
- Narayanasamy, P. 4639
- Narayanaswamy, B. C. 1360
- Narayanaswamy, S. 9022
- Narcy, J.-P. 2939
- Nard, M. Le 6183
- Nardin, C. 5740
- Nariani, T. K. 3316, 8058
- Nascimento, I. F. do 3180
- Nash, D. T. 319
- Nasimov, A. 3571
- Nasimov, A. N. 1905
- Nassar, A. R. 449
- Natali, S. 5872
- Natal'ina, O. B. 578, 5129, 7574
- Nataraj, T. 7297
- Natarajan, C. 838
- Natarajan, C. P. 332, 8156, 8157
- Natarajan, P. N. 3077
- Natarajan, S. 845, 4053, 6429, 8276
- Natarjan, C. P. 6247
- Nath, P. 1178, 4892, 7670, 7694, 8596, 8644
- Nation, H. J. 891
- Natividade, J. V. 2518
- Naton, E. 1764
- Natsvin, A. V. 1718
- Natsvlishvili, V. I. 6738
- Naude, E. 1906, 8535
- Nauer, E. M. 794, 6328, 6334, 7141, 8099
- Naumann, W.-D. 947
- Naumann, W. D. 7521
- Naumova, G. A. 2692, 4323
- Naumova, G. E. 7112
- Nauriyal, J. P. 807, 1509, 4064
- Naurzokov, Yu. Kh. 3393
- Navara, J. 3735
- Navarrete, A. 3679
- Navarro, A. A. 6902
- Navarro, S. 3139, 8088
- Nayak, U. R. 348, 7105
- Nayar, P. V. 8291
- Nayudu, M. V. 4096
- Nazarova, Sh. I. 5289
- Nazmi Sabri, N. 6301, 6302
- Nazrala, M. L. 6755
- Ndawula-Senymba, M. S. 7
- N'diaye, A. M. 2416
- Neal, J. M. 8015
- Nearn, R. H. 6311
- Nederpel, W. C. 2233
- Nedev, N. V. 7485, 8480
- Nedopil, F. 6281
- Nedranko, L. V. 6907
- Neel, P. L. 2275, 2979
- Neely, D. 6211
- Neff, A. 7580
- Negi, O. P. 8253
- Negi, S. P. 7216
- Negi, S. S. 5869
- Negm, A. A. 8239
- Negm, F. B. 1154
- Negoda, V. I. 927
- Negovclov, S. F. 5700, 5701
- Neil, L. J. 3674
- Neilands, J. B. 174
- Nekrasova, K. K. 2627
- Nel, A. C. 5853
- Nelchinov, I. 339
- Nelen, E. S. 2162
- Nelson, C. E. 6264, 6265
- Nelson, F. E. 7593
- Nelson, J. 3014, 5221
- Nelson, J. W. 1066
- Nelson, K. E. 596, 3599
- Nelson, M. M. 1039, 3503
- Nelson, P. E. 1886, 2922, 4584, 4620, 5408, 5476, 8764
- Nelson, P. V. 2189
- Nema, K. G. 6823
- Nemec, S. 108, 3536
- Németh, M. 3359, 8437
- Nemirovs'ka, E. I. 6736
- Nemsitsveridze, L. V. 3278
- Nenić, P. 6588, 7317
- Nenov, S. 1909, 8537
- Neronova, N. L. 4299
- Nesbitt, W. B. 1898, 2706
- Neshta, I. D. 8005
- Nesius, K. K. 2298, 8955
- Nešpor, L. 3054
- Nesterov, Ya. S. 2530, 6521
- Nesterova, I. P. 4504
- Netherlands, Consulentschap te Hoorn 6184
- Netherlands, Consulentschap voor Champignonteelt 6120
- Netherlands, Consulentschap voor de Tuinbouw, Limburg 3422
- Netherlands, Instituut voor Bodemvruchtbaarheid 4956, 5095, 5151, 6962
- Netherlands, Instituut voor Plantenziektenkundig Onderzoek 5073, 5698, 6772, 6961
- Netherlands, Instituut voor Tuinbouwtechniek 5, 23, 100, 1132, 1314, 1972, 7285, 8581
- Netherlands, Laboratorium voor Bloembollenonderzoek 2219
- Netherlands, Landbouw-Economisch Instituut 7853
- Netherlands, Proefstation voor de Bloemisterij in Nederland te Aalsmeer 6126
- Netherlands, Proefstation voor de Boomkwekerij te Boskoop 2516, 4604
- Netherlands, Proefstation voor de Fruitteelt 5697, 6670
- Netherlands, Proefstation voor de Groenten- en Fruitteelt onder glas te Naaldwijk 704
- Netherlands, Proefstation voor de Groenten- en Fruitteelt onder glas te Naaldwijk 1068
- Netherlands, Proefstation voor de Groenten- en Fruitteelt onder glas to Naaldwijk 1135
- Netherlands, Raad van Nederlandse Bloembollenondernemers, Afdeling Afzetbevordering 6165
- Nettles, V. F. 3663, 6061, 7752, 7779
- Neubauer, S. 2356
- Neubeller, J. 1002, 1004
- Neumann, D. 941, 942, 943, 8365
- Neumann, G. 6103
- Neumann, K.-H. 1307
- Neumann, K. H. 8431
- Neumann, K.-H. 8813
- Neumann, U. 941, 942, 943, 8365
- Neuray, G. 8887
- Neururer, H. 1681
- Neury, G. 2614
- Neustein, S. A. 7035
- Neve, R. A. 3955, 3956
- Nevins, D. J. 8956
- Nevzgodina, L. V. 1965
- New, P. B. 443
- New Zealand, Levin Horticultural Research Centre 4171, 5074, 5152, 5391
- Newbery, R. J. 534
- Newcomb, E. H. 4480
- Newcombe, F. 3073
- Newell, I. M. 5565
- Newhall, W. F. 2400
- Newsome, W. H. 4218
- Newton, H. C. 4403
- Ng, E. K. 6426
- Ng, P. 5470
- Ng, S. K. 864
- Ng, T. T. 1417
- Ngo Tkhe Z'n 6734
- Nguyen Thi Tam 329
- Niazi, M. H. K. 3938
- Nichiporovich, A. A. 6487
- Nichols, L. P. 2929, 5476
- Nichols, M. A. 3649
- Nichols, R. 7852
- Nicholson, J. F. 5102
- Nickell, L. G. 2476, 7255, 8249, 9261
- Nickelson, R. R. 3492
- Nickerson, G. B. 7996, 7998
- Nicola, M. G. de 6994
- Nicolai, J. 4232
- Nicolli, C. 1806, 1851
- Nicotina, M. 888, 2097
- Nicotra, A. 1814, 1815, 3509
- Nicotra, F. P. 2597
- Nielsen, H. S. 3899
- Niemann, E. 5599
- Niemenin, M. 1193
- Nierenberg, L. 4681
- Nieto H., J. 6340, 6729
- Nieuwdorp, P. J. 310
- Nieuwhof, B. J. 4377
- Nieuwhof, M. 8744
- Nieves, M. 8459
- Niezborala, B. 946
- Nigam, P. M. 330
- Nigam, S. K. 9017
- Nigeria, Cocoa Research Institute 4035
- Nigeria, Institute for Oil Palm Research 9181
- Nigh, E. L., Jr. 4002, 4615
- Nijensohn, L. 7565
- Nijjar, G. S. 796, 4008, 7422
- Nijse, F. 7461, 8405
- Nijse, L. 8505, 8506
- Nikaido, T. 3068
- Nikishin, K. G. 7346
- Nikitina, K. V. 8677
- Nikolaev, V. S. 3429
- Nikolaeva, L. A. 2333
- Nikolaeva, S. I. 1732
- Nikolenko, O. I. 5874
- Nikolić, B. 7317
- Nikolić, M. 6545
- Nikolov, B. A. 5242
- Nikolov, I. 7815
- Nikolova, N. 6148
- Nikolova, V. 7084
- Nikov, M. 6734
- Nikul'shin, V. P. 6025, 6026
- Nilner, E. 4405
- Nilov, G. I. 3368, 4268
- Nilova, V. P. 1805
- Nilson, E. B. 4924
- Nilsson, F. 8364
- Nilsson, G. 6966
- Nilsson, I. 3681
- Nilsson, K. 3876
- Nimmo, R. G. 2479
- Nir, I. 7150
- Niranjan, G. S. 9029
- Nirwan, R. S. 3228
- Nishi, S. 3323
- Nishibe, S. 9031
- Nishida, T. 2430
- Nishijima, C. 3483
- Nishimoto, R. K. 7629
- Nishimura, G. 8938
- Nishioka, T. 4723
- Nishita, H. 2789
- Nisio, J. 8810
- Nito, N. 3567
- Nitranský, S. 8576
- Nitsch, J. P. 3296
- Nizhko, V. F. 1239
- Nizhmak, N. 3112
- Nižňanská, A. 5757
- Njoku, E. 6151
- Noack, E. 7047
- Nockrashy, M. El 2414
- Noculac, A. 9032
- Noguchi, T. 4477
- Noll, C. J. 4371
- Nollendorfs, V. 7683
- Noma, Y. 2401, 3145
- Nomerov, B. A. 2991, 5478
- Nomura, N. S. 6431, 9241
- Noodén, L. D. 3751
- Noordegraaf, C. V. 6231, 6990
- Noort, L. van 705, 2220, 4122, 4608, 7031
- Nord, O. 8546
- Nordby, H. E. 1497, 1498, 3156, 8100
- Norman, J. C. 2911, 4387, 6099, 7642
- Norman, S. M. 4806
- Normand, M. Le 5246
- Norris, K. H. 1344, 8877
- Norris, R. D. 1701, 1702
- Norris, R. F. 5054
- North, C. 5427
- Northcote, D. H. 1673
- Northover, J. 7580
- Norton, C. 207
- Norton, R. A. 539, 5932
- Norton, R. L. 463
- Norway, International Seed Testing Association 7030
- Noskova, E. V. 8382
- Nosyrev, V. I. 5536
- Noszczyńska, K. 611
- Noto, G. 542, 6698
- Notton, B. A. 2747
- Novac, R. 8474
- Novais, R. F. De 227
- Novák, F. 2840
- Novák, I. 4775, 9038, 9056
- Novák, M. 6149

- Novák, V. 4730
 Novitskaya, E. I. 7769
 Novosel'skii, O. 5881
 Novotný, J. 5511
 Novruzov, K. 1185
 Nowicka, B. 8007
 Nowosielski, O. 7604
 Nozzolillo, C. 8705
 Nuamah, G. E. A. 8135
 Núcé de Lamothe, M. de 5615, 6398
 Nuckolls, C. E. 8294
 Nuijten, H. M. C. 1686
 Nukhimovskii, E. L. 5520
 Nunes, M. A. 3194
 Nurdin, M. S. 2463, 6422
 Nursten, H. E. 757
 Nussbaum, J. J. 2314
 Nutman, F. J. 1577, 1578
 Nuttall, V. W. 158
 Nuyten, H. 4419, 8505, 8506, 8512
 Nye, P. H. 5308, 5309
 Nyéki, J. 5790
 Nyland, G. 2641
 Nyvall, R. F. 6862, 7656
 Ó Riordáin, F. 2904
 Oakes, A. J. 6194
 Oakes, G. L. 8765
 Oatman, E. R. 5737
 O'Bannon, J. H. 3100, 4002
 Obenauf, G. 1812
 Oberbacher, M. F. 2409
 Oberhofer, H. 464, 1751, 8391
 Oberle, G. B. 4201
 Oberle, G. D. 7507
 Oblak, M. 7495
 O'Brien, F. 7705
 Obukhov, R. E. 6617
 Obukhova, A. I. 3120
 O'Callaghan, T. F. 6698
 Ochs, J. 3911
 Ochs, R. 841
 Ockendon, D. J. 152
 Ockerse, R. 1237
 Oda, M. K. 122
 Odakhovskii, E. A. 1101
 O'Daniel, W. 7480
 Odell, D. K. 7935
 Odintsova, O. V. 3280
 Odland, D. 3670
 Odumanova-Dunaeva, G. A. 7806
 Oele, J. 2586, 7351
 Oettingen, S. von 5354
 Ofias, S. 9067
 Ogaki, C. 3107, 3111, 3135, 3149
 Ogan, A. U. 3084
 Ogareva, N. L. 4957
 Ogašaniović, D. 2660, 6661, 7479
 Ogata, G. 2126, 6912
 Ogata, K. 4543, 5821, 6047, 6048, 6872, 8758, 8800
 Ogata, R. 7139, 9088
 Ogawa, J. M. 2632, 5022
 Ogawa, T. 2782, 5288, 7744
 Ogile, W. L. 1220, 6812
 Ogly, M. R. M. 2635
 Ogly, R. S. K. 2635
 Ognyanov, I. V. 5496
 Ogoshi, A. 7654
 Ogura, N. 5366
 Oh, B. L. 2147, 2148
 Oh, S. D. 533, 1059
 Ohashi, H. 6298
 Ohata, T. 2430
 Ohgushi, M. 2651
 Ohira, K. 5933
 Ohkawa, K. 2949
 Ohkawa, M. 6645, 7458
 Ohno, M. 2651
 Oho, N. 3318, 7448
 Ohyama, K. 4590
 Otito, W. A. 5786, 6637
 Okada, F. 3290
 Okagami, N. 730, 4649
 Okamoto, T. 7410, 7411, 7412
 Okawa, K. 2949
 O'Kennedy, N. 6601, 6602
 Okhova, E. P. 5350
 Oknina, E. Z. 6575
 Okolelova, A. P. 44
 Oku, H. I. 5577
 Okubo, M. 2136
 Okuse, I. 7404
 Olangiu, M. 1689, 8478
 Oldenburg, R. 1980, 6138
 O'Leary, J. W. 2879, 3715, 5244
 Olech, K. 5985
 Olešnik, V. P. 7673
 Oleshko, V. D. 7339
 Olien, C. R. 5019
 Olifirenko, A. S. 3429
 Oliveira, A. R. 4059
 Oliveira, C. M. M. De 1903
 Oliveira, D. A. 394, 3200, 5814, 7192
 Oliveira, G. D. de 1983, 2238, 2896, 4381, 5890, 5911, 7760
 Ollagnier, M. 841
 Ollis, W. D. 6463
 Olmo, H. P. 3356, 4156, 5670, 5869
 Olmos, F. S. 7565
 Olney, C. E. 8419
 Olney, V. W. 9236
 Olofsson, B. 6229
 Olojola, A. 3198
 O'Loughlin, J. B. 8312
 Olson, K. V. 1414
 Olsson, K. A. 6628
 Olthof, T. H. A. 2761
 Omelyuta, V. P. 2662
 Omer, M. E. H. 160
 Omori, M. 8637
 Omotoso, T. I. 3198
 Ondieki, J. J. 430
 Ondřej, M. 8708
 Ondzik, J. 5135, 5136
 Ono, S. 6260, 8064, 8067
 Onsager, J. A. 4427
 Onsem, J. G. Van 4673, 6167
 Oo, H. T. 214
 Ooi, S. C. 1602, 9184
 Oosten, A. A. van 1052
 Oosten, A. A. van 5801
 Oosten, H. J. van 91
 Oosten, H. J. van 4983
 Opatrná, M. 2908
 Opitz von Boberfeld, W. 3883, 8912, 8916
 Opoku, A. A. 5558
 Oprea, D. D. 7566
 Opsteeg, L. M. 1353, 2165
 Ordish, G. 574
 Ördögh, G. 6875
 Orebamjo, T. O. 6151
 Orellana Segovia, M. de 8024
 Oren, Y. 3999
 Orfila, E. N. 4755
 Orion, D. 3367, 8785
 Ormrod, D. P. 1322, 2068, 2788, 2813, 4623, 8749
 Orsenigo, J. R. 5894
 Orsi, F. 4061
 Ortega, M. de 3174
 Ortega Obregón, C. A. 5794
 Ortega Y., S. 7699, 7700
 Ortiz, J. 3174
 Orton, E. R., Jr. 7037
 Ortuño, A. 2639, 3114, 6479, 6631
 Os, F. H. L. van 3033
 Osanai, T. 7410, 7411, 7412
 Osawa, T. 1952, 2309, 5893
 Osborne, D. J. 2035, 3296, 3718
 Osgood, E. A. 6689
 Osgood, R. V. 4885, 4886, 6430
 Oshkaya, V. P. 6853
 Osipov, A. V. 6726
 Osipov, F. S. 1101
 Osler, R. 5853
 Osmelak, M. 8774
 Osmond, C. B. 4674
 Osodo, K. 6365
 Osore, V. M. 5655
 Ossani, V. 4248
 Ostanina, L. K. 8337
 Østerbye, U. 5462
 Ostreiko, S. A. 1858
 O'Sullivan, M. 1145
 Oswalt, T. W. 9094
 Oszkini, W. 2199
 Ota, A. K. 4099, 5653
 Ota, S. 6815
 Otani, K. 8919
 Ottenwaelter, M.-M. 8536
 Otto, B. E. 5335
 Otto, G. 467, 4202, 6561, 6562
 Otto, H. 8436
 Ottolini, P. L. 5295, 5306
 Ouda, N. A. 5243
 Ourecky, D. K. 7526
 Ournac, A. 5146
 Overcash, J. P. 5806
 Overman, A. J. 4570, 6144, 6975, 6977
 Overman, J. L. 2001
 Ovsyannikov, A. S. 2678, 2681, 5053
 Ovsyannikov, R. S. 2681
 Owais, M. H. A. 2231
 Owolabi, C. A. 5613
 Owusu-Domfeh, K. 5614
 Owusu, G. K. 385
 Oxley, T. A. 7035
 Oya, V. 2025
 Oyama, N. 1780
 Øydvín, J. 3524, 4316, 4328, 7529
 Oyeade, I. T. 837, 7183
 Oyekun, P. O. 211, 1231
 Ozasa, M. 4906
 Ozbun, J. L. 188, 6800
 Ozdoev, B. A. 1251
 Özek, B. 8528
 Ozolina, I. A. 21
 Paardekoooper, E. C. 8187, 9208, 9217
 Paauf, F. van der 2810
 Pablo, I. S. 1595
 Pachaly, P. 7104
 Pachuliya, K. F. 1483
 Pack, D. E. 6758
 Pack, M. R. 6932
 Pacit, J. 8425
 Pacold, I. 2819, 3742
 Pacques, M. 6698
 Padda, D. S. 233, 3690, 6045, 7666, 7765, 8675
 Padhy, S. N. 6300
 Padley, F. B. 3090
 Padmanabhan, D. 845, 6429
 Padova, R. 3771
 Padovani, N. 5291
 Paetzholdt, M. 1006
 Paetzold, D. 1765, 7392, 8380
 Page, A. L. 440
 Paglietta, R. 1126, 1895, 5024, 5805
 Pagnoni, U. M. 3064
 Pagter, J. A. W. de 4664
 Pagter, J. W. A. de 6165
 Pahllich, E. 6015
 Paik, W. H. 1180
 Painter, J. W. 5774
 Pais, M. S. S. 8911
 Paisley, R. B. 477
 Paiz, L. 3174
 Pakaln, D. A. 8018
 Paknikar, S. K. 3089
 Pakrashi, S. C. 349
 Pál, G. 5535
 Pál, I. 245
 Pal, N. 6874
 Pal, R. N. 7161, 7162
 Pal, S. K. 367, 7971
 Palade, L. 2
 Palamarchuk, L. D. 3573
 Palaniswami, A. 4871
 Palaniswamy, K. P. 1281
 Palát, M. 2758
 Palenzona, M. 7435
 Paleologou, A. M. 8280
 Palevitz, D. 3778
 Pálfi, G. 3628
 Palička, O. 2511
 Paliwal, G. S. 6949, 9178
 Paliwal, K. V. 2838, 3773
 Pallas, J. E., Jr. 2044, 3724, 6856
 Paller, E. C. Jr. 7748
 Palma, V., R. 5263
 Palmer, J. W. 1710
 Palmer-Jones, R. 856
 Palmer, R. L. 5572
 Pálos, T. 5338
 Palti, J. 3763
 Paltrinieri, G. 1177, 1242, 6711
 Paluch, B. 8774, 8935
 Paludan, N. 7054, 7793
 Palyanitsa, G. I. 2177
 Panait, E. 7373, 8471
 Pancaro, L. 5726
 Panchenko, V. P. 8648
 Panda, K. C. 846, 7232
 Pandalai, K. M. 4853
 Pande, Y. D. 8082
 Pandeliev, S. 2725, 4349
 Pandey, H. K. 5624
 Pandey, K. K. 2250
 Pandey, R. C. 9039
 Pandey, S. N. 2707
 Pangborn, R. M. 2615
 Paniago, E. 3192
 Panina, V. V. 6296
 Panine, S. 2640
 Panje, R. R. 8198
 Pank, F. 326, 2320, 7988
 Pankajakshan, A. S. 9150
 Pan'kova, T. F. 1858
 Pannonhalmi, K. 246
 Pannonhalmi, M. 191
 Panopoulos, N. J. 1294, 3803, 6095
 Pan'shina, T. N. 2116
 Pant, D. D. 4402
 Pant, U. C. 1449
 Pantastico, E. B. 8804
 Panteleev, A. A. 5952
 Pantelić, M. 3490, 6555, 6663
 Panter, R. A. 9072
 Pantos, C. E. 8806
 Panza, J. D. 8197, 8206
 Papalini, P. 6901
 Papavizas, G. C. 5255
 Papendick, R. I. 3316
 Papenhagen, A. 7789
 Papia, P. M. 6839, 6840
 Papo, S. 3583
 Papp, E. 7674
 Papp, J. 6682
 Pappo, R. 5428
 Pap'yan, N. M. 1965
 Parchomchuk, P. 2633
 Pardeshi, N. P. 346
 Parekh, L. J. 8094, 8095, 8096
 Pares, R. D. 3473, 5038
 Parfenova, L. S. 2776, 8659
 Parfitt, R. I. 1860, 7368
 Paribok, T. A. 6080, 6922
 Parihar, R. L. 6250
 Parijs, R. Van 6867
 Parikh, H. S. 166
 Paris, R. 4727
 Paris, R. R. 7103, 8102
 Park, B. K. 1179
 Park, C. J. 779
 Park, D. H. 2305
 Park, K. E. Y. 6008
 Park, K. E. Y. 8725
 Park, N. P. 982, 983, 984, 1034, 1035, 1256
 Park, R. B. 1673
 Park, S. K. 544, 1308
 Park, W. M. 1312, 2149
 Park, Y. H. 1312, 2149
 Parkash, V. 3977
 Parker, J. B. 2178
 Parkes, R. R. 8292
 Parkhomenko, A. A. 1762
 Parkin, J. C. 7194
 Parlapanova, M. 3701
 Parliment, T. H. 2429
 Parma, A. 6379
 Parnata, J. 9212, 9213
 Parr, J. F. 9246
 Parr, W. J. 5217
 Parra, H. J. 3195, 5619
 Parra, M. 2639, 6479, 6631
 Parry, M. S. 8318
 Parsons, C. S. 1287
 Partridge, I. J. 9116
 Partyka, R. E. 2876
 Parups, E. V. 2290, 3921

- Parynow, S. 7333
 Pashkar', S. I. 5744
 Passarini, I. 2506
 Passecker, F. 1714, 7319
 Patáková, D. 3083
 Pataragetvit, S. 1546
 Patarava, B. D. 3287
 Pate, J. S. 1673
 Patel, J. D. 2912
 Patel, K. G. 3937
 Patel, R. Z. 6404
 Patel, S. I. 8943
 Path, J. 4006, 6359
 Pathak, M. D. 2501
 Pathak, S. P. 3591
 Patil, A. V. 1475, 6101
 Patil, J. A. 5301
 Patil, J. S. 9192
 Patil, R. B. 6003
 Patil, S. P. 7658
 Patil, S. S. 176, 177, 7217
 Patil, V. D. 348, 7105
 Patnaik, R. 632
 Patourel, G. N. J. le 4747
 Patrino, M. A. 9115
 Patro, G. K. 1622, 8208, 9240
 Pattanaik, A. 7755
 Pattanashetti, H. V. 567, 2715
 Patterson, B. D. 5895, 5896, 6594
 Patterson, J. B. E. 3299
 Patterson, M. E. 8799
 Patton, S. 5380
 Patton, T. G. 3829, 6950
 Patty, G. E. 2327
 Paulechová, K. 3528
 Paulić, N. 7457
 Paulin, A. 3924
 Paulin, J.-P. 4277
 Paull, R. E. 173
 Paulson, K. N. 1968, 3820
 Paulson, R. E. 3807, 6090
 Paulus, A. O. 5221
 Paunović, A. A. 6661
 Paunović, S. A. 2659, 2660, 3435, 3465, 3505, 7479
 Pauvert, P. 4425, 6847
 Pavgi, M. S. 2319
 Pavlenko, N. M. 7595
 Pavlenko, V. A. 6262
 Pavlenko, V. P. 6673
 Pavlov, N. 1104, 2718, 8537
 Pavlov, P. 2043, 7085
 Pavlova, M. A. 528
 Pavlova, N. S. 3051
 Pavlova, Z. 5397, 6967, 6970
 Pavlović, S. D. 9057
 Pavlovich, S. D. 9057
 Pávule, A. 8972
 Pawar, J. R. 1624
 Payne, C. B. 5764
 Payne, C. H. 3449
 Payne, J. F. 2833
 Payne, R. C. 4059
 Payne, R. N. 1334, 8841
 Paz, U. 3919
 Peacock, B. C. 3178, 4836
 Pearce, H. L. 5430
 Pearce, T. L. 8209
 Peavy, W. S. 5903
 Pech, J. C. 4278, 4284
 Pech, J.-C. 5044
 Pechenitsyn, V. P. 298, 2960
 Pecherskaya, S. N. 908
 Pécheur, J. 6777
 Peck, N. H. 2745
 Pedelski, A. V. 4524
 Peel, A. J. 3296
 Peer, P. 1911
 Peerally, A. 2906, 4109, 9278
 Peerbooms, H. 3388, 5813
 Pegg, G. F. 1230, 8691
 Pegg, K. G. 1214
 Peggie, I. D. 6650
 Pehrson, J. E. 4001, 5564
 Peisakhzon, B. I. 6857
 Pejkić, B. 3448, 3506
 Pejml, K. 345
 Pejović, S. 3457, 6700
 Pekárik, Š. 5851
 Pelham, J. 2108
 Pell, E. J. 6841, 8681
 Pelletier, J. 3798, 7618, 7650, 7651, 7680, 7681, 7776, 7817, 7824, 8510
 Pellett, H. M. 3925, 7352, 8353
 Pellett, N. E. 5485
 Pelley, R. H. Le 7282
 Pellissier, M. 1210
 Pelser, P. du T. 6362
 Pelt, J. M. 3949, 3950
 Penel, C. 129
 Peng, J.-T. 7825
 Peng, S. Y. 847, 6435
 Pen'kov, L. A. 1996, 8977
 Penkov, M. 7467
 Pennacchioni, A. 8729
 Penner, D. 5445, 5446
 Penner, H. 7434
 Penney, B. G. 3532
 Penningsfeld, F. 2273, 6166
 Pennock, W. 875
 Penny, D. 221
 Penny, P. 221
 Penny, R. W. 6619
 Pennypacker, B. W. 4620
 Penrose, L. J. 3473, 5038
 Penteado, L. A. de C. 5957, 6417
 Pepelyankov, G. 4255
 Peper, H. 2198
 Peplińska, M. 616
 Peplow, A. J. 8627
 Peracchi, A. L. 8748
 Perdomo, A. 5623
 Pereira, A. E. 2112
 Pereira, A. L. G. 8652
 Pereira, C. P. 9137
 Pereira, J. L. 3201, 3206, 4058, 6408
 Perera, B. P. M. 6464
 Perera, K. S. O. 9152
 Perera, P. S. S. 4544
 Péresse, M. 1388
 Peresypkin, V. F. 7730
 Perevozova, V. A. 8429
 Pérez Antich, E. 9264
 Perez, C. 4790
 Pérez Escobar, R. 8201
 Pérez, J. E. 669
 Pérez Pérez, N. R. 7695, 7701
 Pérez Z., R. 8626
 Pérez Zamora, A. 8132
 Peri, C. 1931
 Peries, O. S. 5645, 9270
 Perkins, H. F. 1821
 Perkins, I. 3916, 4392
 Perkins, R. M. 1515
 Perko, J. 4594
 Perlasca, G. 2888
 Pernerstorfer, J. 5014
 Pernet, R. 8971
 Perov, N. N. 2728, 5701
 Perret, P. 5125, 5660
 Perrin, M. E. B. 3354
 Perry, C. H. 1747
 Perry, D. A. 5274, 5275
 Perry, F. B., Jr. 5466
 Perry, J. H. 4657
 Perry, J. S. 2646
 Perry, M. W. 7805
 Perry, R. S. 2241, 5423
 Perry, S. K. 1213
 Persikova, Z. I. 5293
 Persley, G. J. 423
 Person 1153
 Persson, S. 3896
 Persson, S. P. E. 7840
 Perstnev, N. D. 1093
 Pertuit, A. J., Jr. 6214
 Perumal, R. S. 838
 Peschel, R. 1691
 Pessala, R. 2738
 Pessala, T. 8856
 Petenucci, W. 1581
 Petermair, J. 464
 Peters, C. L. 5780
 Peters, D. 6006
 Peters, J. 6201
 Peters, W. 4285
 Peters, W. S. 8500
 Peterson, L. E. 3680, 3817
 Peterson, R. L. 7867, 8629
 Petkov, Ch. 6493
 Petkov, G. 1082, 2711
 Petkov, M. 171
 Petkov, V. 213
 Petrenko, N. A. 4638
 Petrescu, A. 7307, 7426
 Petrescu, M. 1689
 Petříček, D. 7994
 Petříková, K. 2887
 Petrlik, Z. 345, 3045
 Petrosyan, A. A. 2664, 5070
 Petrosyan A. A. 5700
 Petrov, A. 2566, 5035, 5036, 8379
 Petrov, A. A. 1829
 Petrov, H. 7630, 8773
 Petrov, K. H. 4589
 Petrov, Kh. 4414, 4547
 Petrov, N. N. 681
 Petrov, N. P. 5190
 Petrov-Spiridonov, A. E. 5979
 Petrov, V. P. 1087
 Petrová, E. 2953
 Petrova, V. 8978
 Petrovskaya-Baranova, T. P. 4313
 Petrunov, S. 8340
 Pettersson, J. 5802
 Pettoruti, C. A. 6258
 Petzold, H. 729, 832, 1958
 Pevná, V. 141
 Pew, W. D. 4452
 Peyer, E. 2705, 3577
 Peyrière, J. 5348
 Pfammatter, W. 1778
 Pfeiffer, C. L. 8863
 Pflüger, R. 128
 Phadnis, B. A. 5966
 Phadnis, N. A. 756, 1124, 1408, 9146
 Phares, R. E. 99
 Pharis, R. P. 2928
 Pharr, D. M. 8793
 Phatak, H. C. 3966
 Phatak, K. D. 7757
 Phelps, R. H. 2854, 5686, 9092
 Philip, T. 7593
 Philippines, Sugar Institute 8189
 Phillips, D. J. 8868
 Phillips, D. O. 4042
 Phillips, F. T. 4929
 Phillips, H. 5731
 Phillips, I. D. J. 5909
 Phillips, J. H. H. 514
 Phillips, P. J. 8292
 Phillips, R. L. 3108, 3141, 6339, 8065
 Phillipson, J. D. 8961
 Philpotts, L. E. 4174
 Phinney, B. O. 2825
 Phithakpol, B. 82
 Phogat, K. P. S. 5626
 Piantadosi, C. 4759
 Piasecka, H. 3060
 Piatelli, M. 5595, 6994
 Picco, D. 5295, 5306
 Pichl, I. 344
 Pichler, P. 464
 Pickard, B. G. 3847
 Pienaar, W. J. 5812
 Pieniążek, J. 8407
 Pieniążek, J. 6520
 Pieniążek, J. 8400
 Pieniążek, S. A. 6520
 Pieniążek, S. A. 7333
 Pierandrei, F. 3557, 3593
 Pierce, W. H. 1559
 Piergentili, D. 6258
 Pieringer, A. P. 2400
 Pierre, J.-N. 7933
 Pieters, E. P. 1527
 Pietura, A. 6318
 Pike, L. M. 620, 4439
 Pilac, L. M. 4527
 Pilet, P.-E. 3768
 Pilger, D. 8699
 Pillai, S. S. 3176
 Pillay, N. G. 9153
 Pilnik, W. 2609
 Pimenov, M. G. 3975
 Pimentel, D. 2501
 Pimpini, F. 144, 5176
 Pinckney, H. R. 2039
 Pinder, A. R. 3058
 Pinheiro, R. V. R. 1009, 1613
 Pinkas, J. 3130, 4066
 Pinnock, D. E. 4955
 Pinon, A. 6387
 Pinthus, M. J. 4549
 Pinto de Torres, A. 5007
 Pinto, G. L. 1009
 Pinto, M. E. 4889
 Pionnat, J.-C. 715
 Piperkova, N. 3952
 Pipinis, I. A. 6308, 6309
 Piranishvili, N. S. 7717
 Piras, N. 1116
 Pirtskhalaishvili, B. I. 3268, 4902
 Pirtskhalaishvili, E. S. 9100
 Pirtskhalaishvili, S. Kh. 3110, 7268, 9274
 Pisanu, G. 4025
 Pitblado, R. E. 2875
 Pither, R. S. 3551
 Pivovarov, V. F. 5954
 Pizarro, O. C. 7565
 Plamenac, M. 4030
 Plat, M. 9030
 Plate, H.-P. 2236, 7889
 Plate, H. P. 8878
 Plaud, G. 1591
 Plavcová, O. 2953
 Plavšić-Banjac, B. 3188
 Plavski-Banjac, B. 7241
 Plekhanova, N. V. 7110
 Plessis, J. A. du 1469
 Plessis, J. A. du 6330
 Plessis, C. J. du 4077, 6421, 7228
 Plimmer, J. R. 723
 Plocharski, W. 7493
 Plock, H. 62, 63, 65, 490, 495, 991, 992, 1003, 1040, 4229, 5013, 5759, 8423
 Ploegman, C. 2257, 5436
 Plögmacher, H. 5473
 Plotnikova, I. V. 920, 4313
 Plotnikova, T. S. 4237
 Plüghan, A. 8376
 Plumier, W. 132
 P'ng, T. C. 6426
 Poapst, P. A. 4707
 Poddar, S. 8253
 Podolich, I. I. 6538
 Poe, S. L. 1288, 6694, 6973, 6975, 6976
 Pogosyan, K. S. 4342, 5835
 Pogosyan, S. A. 1894
 Poisson, J. 1427, 9050
 Pokharkar, R. N. 7658
 Pokinbara, V. A. 59
 Pokorný, M. 5504
 Pol, P. A. Van de 3902
 Poláček, J. 2845, 6075
 Poláčeková, D. 7692
 Polák, J. 3704, 6149
 Polák, K. 2865
 Polaković, F. 6746
 Polegaev, V. I. 7664
 Poletto, G. 3664
 Polikarpova, F. Ya. 7338
 Polishchuk, L. R. 4238
 Poljakoff-Mayber, A. 210
 Pollock, B. L. 624
 Pollock, B. M. 192, 3646, 4372
 Polyakov, V. Yu. 8901
 Pomier, M. 1558
 Pomilio, A. B. 4362
 Pommer, G. 7021
 Pomohaci, N. 7564
 Pompei, C. 1931
 Ponca, A. M. 1500
 Ponchet, J. 269, 716
 Ponkratenco, G. A. 7532, 8511
 Ponomarchenko, V. B. 1101
 Ponomarchuk, V. P. 2514
 Ponomarenko, V. V. 4175, 5711
 Ponomareva, S. A. 6926, 8778
 Ponte, J. J. da 9168
 Ponte, N. T. da 8671
 Ponzio, A. 5937, 5938

- Poole, R. T. 1384, 3897, 7025, 7027, 7028, 7877, 8931
 Poovaiah, B. W. 6843, 6885, 7431
 Pop, I. 8474, 8556
 Popenoe, J. 8124
 Popgeorgiev, G. 4750
 Popham, R. A. 7939
 Popov, E. 4315
 Popov, L. N. 1241
 Popov, P. 1423, 2337, 6257, 8003
 Popov, T. 1097, 7548
 Popova, D. 1264, 3810, 6895
 Popova, I. 4168, 4206, 5799
 Popova, I. A. 7055
 Poppe, J. A. 8824
 Populer, C. 6425
 Porpáczy, A. 7492
 Porrey, W. 4232, 4279
 Porritt, S. W. 3431
 Portas, C. A. M. 1147, 1519
 Porter, C. A. 7254
 Porter, F. A. E. 5290
 Porter, L. A. 1046
 Posevitz, V. 3628
 Poskuta, J. 5819
 Posnette, A. F. 1715, 4205
 Pospelova, Yu. S. 6727, 8508
 Pospisil, F. 7215
 Pospíšilová, J. 4388, 5170, 5930, 6002, 6943
 Possingham, J. V. 4394, 6479, 7594, 8573
 Possner, E. 5392
 Posthumus, A. C. 4939
 Postiglione, L. 169, 239
 Potanina, A. S. 3512
 Potapenko, Ya, I. 555
 Potapov, N. S. 5823
 Potapov, S. P. 6635
 Potapov, V. A. 2548, 2560, 2570
 Potec, I. 2
 Potier, P. 770, 771, 1354, 1355, 9030, 9050
 Potrykus, I. 6154
 Potter, C. A. 909, 1712, 2562
 Potter, H. S. 1195, 3698
 Potter, J. M. S. 1056, 1070, 1723
 Potter, J. W. 2761
 Pouget, R. 1107, 7584
 Poulsen, E. 2489, 6553
 Poulter, C. D. 7966
 Poupat, C. 1354, 1355
 Poupet, A. 2180
 Poux, C. 5146
 Povalyaeva, I. A. 4586
 Povolný, M. 4265
 Powell, J. G. 7236
 Powell, L. E. 1779, 6489
 Powell, R. D. 8922
 Powell, R. G. 4761
 Powell, R. H. 7924
 Powers, M. J. 8799
 Poyser, J. P. 8960
 Poyser, K. A. 8960
 Pozděna, J. 7910
 Pozdova, L. M. 527
 Pozler, P. 3362
 Prabhakar, V. S. 765
 Prabhu, A. S. 7757
 Pradhan, G. C. 6093
 Pradhan, S. K. 1641
 Prakasam, P. 1636
 Prakash, N. 3086, 3172
 Prasad, A. 3218, 3228
 Prasad, Am. 3210
 Prasad, Ay. 3210
 Prasad, M. 240, 1286, 7606, 7785
 Prasad, N. N. 8654
 Prasad, R. 3
 Prasad, S. 656, 3077
 Prasad, S. K. 852, 2484
 Prasad, S. S. 8110
 Prasada Rao, K. K. 7244
 Prat, R. 3768
 Pratella, G. C. 604, 897, 1507, 6711
 Pratt, C. 962, 963, 6728
 Prebble, K. F. 4898
 Preez, P. Du 409
 Preininger, V. 9044
 Prescott, B. 6035
 Pressey, R. 2883
 Preston, A. P. 1726, 8318, 8341, 8342
 Pretorius, M. E. 7199
 Pretorius, W. J. 3092, 5542, 9070
 Preusse, H. 900
 Preziosi, P. 7455
 Price, R. 7623
 Price, R. L. 1508
 Price, W. C. 4798, 5557, 9154
 Priest, K. L. 1783
 Priestley, C. A. 39
 Prieto, J. 9110
 Prikhod'ko, N. V. 1239, 6005
 Prileszky, G. 8460
 Prillinger, F., Jr. 7591
 Primukhamedov, I. 9016
 Prince, V. E. 4242, 5027, 5034
 Pringle, K. L. 4950, 7394
 Prioux, G. 4070
 Prisco, J. T. 2879, 5244
 Pritchard, G. H. 4858
 Procopiou, J. 1477
 Procter, C. H. 1528, 7631
 Proctor, F. J. 664
 Proctor, J. T. A. 2557
 Proebsting, E. L. 1709, 5020
 Proebsting, E. L. Jr. 525
 Proebsting, E. L., Jr. 8432
 Prokic-Immel, R. 5685
 Prokof'eva, N. G. 3961
 Prokopenko, M. G. 8540
 Prokopivnyuk, L. M. 5284
 Prokudina, V. F. 5210
 Pron', A. S. 5700
 Pronin, V. A. 6488
 Proost, P. 8339
 Prosteva, M. I. 7117
 Protacio, D. B. 2447
 Protzenko, A. E. 2295
 Protzenko, E. P. 2295
 Protzenko, G. D. 4961
 Protsko, R. F. 249, 8794
 Providentii, R. 2817, 7684
 Pruitt, W. O. 5354
 Prunier, J.-P. 5040
 Pruss, A. G. 3498, 4271, 4283
 Pruszyński, S. 7093
 Pryor, R. L. 1337
 Przybyl, D. 8995
 Przyrembel, G. 8884
 Pšenák, M. 3078
 Pshonova, S. I. 4244
 Ptit'syna, N. V. 4238
 Puchnin, V. N. 7808
 Pudrikova, L. P. 7559
 Puech, J.-L. 5064
 Puerner, N. J. 157
 Pugachev, Yu. N. 2861
 Pugh, G. J. F. 8917
 Puiu, S. 7566
 Pujan, M. M. 1011
 Pujarniscle, S. 3254
 Pulver, R. J. 1225
 Pump, G. 6958
 Pundrik, K. C. 668
 Punja, N. 4121
 Punsri, P. 77
 Pupko, V. B. 5824
 Purazrang, H. 4062
 Purba, A. Y. L. 9187
 Purchase, I. F. H. 7199
 Purcifull, D. E. 5912
 Puri, H. S. 4731, 5515
 Purkayastha, R. P. 7842
 Purr, A. 4048
 Purselove, J. W. 1668, 3211
 Purves, W. K. 162
 Puschmann, R. 1303
 Pushkin, A. V. 2061, 8723
 Pushparajah, E. 4881, 7226
 Pusztai, A. 203, 5239, 7724
 Putkaradze, Sh. A. 7270
 Putman, E. W. 6479
 Putnam, A. R. 628, 2828, 8769
 Putsilo, A. I. 4958
 Putz, C. 103, 531, 1864
 Py, C. 402, 9194
 Pyarnik, T. 2025
 Pyo, H. K. 1201
 Pyrkova, E. M. 2549, 2604
 Pyshina, Z. S. 2678, 2679
 Pyzhov, V. Kh. 3368
 Qadry, J. S. 3085, 4757, 4758
 Qédan, S. 3072
 Quackenbush, F. W. 286
 Quacquarelli, A. 4595, 5853
 Quadros, A. S. 1561
 Quadry, J. S. 2332
 Quaglini, A. 1126
 Quaglio, M. P. 3780
 Quagliotti, L. 127, 4530
 Quamme, H. 2587, 7353
 Quebedeaux, B. 5968
 Queiroz, A. 4060
 Queiroz, O. 5687, 7933, 8926
 Querfurth, G. 7570
 Quedo, C. 8626
 Quiceno H., G. 391
 Quinlan, L. E. 5428
 Qureshi, B. H. 491
 Qureshi, B. H. 507
 Qvarnström, K. 6229
 R., F. 1663
 Raabe, R. D. 5428, 7573, 7851
 Raafat, A. 1217, 8813
 Rabaron, A. 9030
 Rabasse, J.-M. 3635
 Rabb, R. L. 2501
 Rabéchault, H. 1605, 2458, 6412, 6413, 9185
 Rabej, L. 4998
 Rachmilevitz, T. 8009
 Racusen, D. 7721
 Rác, J. 7575
 Radchenko, N. M. 7983
 Radeva, V. 213
 Radewald, J. D. 2288, 3014
 Radha, K. 6401
 Radhakrishnan, V. 1567
 Radin, J. W. 3673
 Radler, F. 579
 Radović, V. 6626
 Rădulescu, E. 1689
 Radulov, L. 4349, 5844
 Radyukina, N. A. 8723
 Rae, H. L. 1462
 Raese, J. T. 3170, 4828
 Rafailä, C. 1689
 Ragab, F. Y. 630
 Raghava, S. P. S. 6173
 Raghavan, B. 332, 6247
 Raghavan, N. 3240
 Ragozzino, A. 888, 1369, 2097
 Rahimi, A. 865
 Rahman, A. R. 6105
 Rahman, F. 9273
 Rahman, M. U. 6253
 Rahović, D. 2619
 Rai, J. M. 7115
 Rai, K. M. 3476
 Raifer, L. 1910, 4344, 8558
 Raiko, P. N. 7512
 Raikova, L. 8775
 Raina, N. S. 3881
 Rainbow, A. F. 135
 Rainchikova, G. P. 5803
 Raininko, K. 7020
 Rainova, L. 8594
 Rains, D. W. 1673
 Raitsyna, G. I. 5344
 Raja, M. R. 3938
 Rajagopal, R. 5898
 Rajagopalan, P. 7762
 Rajale, G. B. 3
 Rajan, A. K. 7716
 Rajani, V. G. 4892
 Rajaratnam, J. A. 1603, 3245, 6411, 7212, 7213
 Rajendran, V. 2464
 Rajgopalachar, K. R. 7311
 Rajpoot, M. S. 4064
 Rajput, M. S. 1592, 5629
 Raju, D. S. 3225
 Raju, K. S. K. 4857, 6403, 8147, 9161
 Raju, M. V. S. 7932
 Rajzman, A. 2404, 3154, 4018, 4809
 Rakhi, M. 4919
 Rakić, B. 2520
 Rakitska, V. 5361, 6072, 6094
 Ram, A. 4845
 Ram, C. 4845
 Ram, C. S. V. 8272
 Ram, H. B. 5606, 8412
 Ram, H. Y. M. 3056, 7879
 Ram, R. S. 4095, 8223
 Rama Rao, B. V. 3225
 Rama Rao, M. R. 8213
 Rama Rao, V. 6297
 Ramachandran, M. 2477
 Ramadasan, A. 1560
 Ramakrishnan, C. V. 8094
 Ramakrishnan, G. 8880
 Ramakrishnan, K. 159, 1189, 2846, 6818, 7766, 7767, 9249
 Ramakrishnan, S. 3974
 Ramakrishnan, V. 300, 725
 Ramallo, N. E. V. de 7122
 Raman, N. P. 3150, 9106
 Ramana Rao, P. V. 8213
 Ramanujam, S. 8987
 Ramaswamy, A. S. 808
 Ramaswamy, S. 8761
 Ramiah, M. 6887
 Ramina, A. 71, 499
 Ramirez de Vallejo, A. 4252
 Ramirez Silva, F. J. 5658
 Ramirez Soto, R. 4764
 Ramming, D. W. 90
 Ramos, D. E. 524
 Ramos, E. B. 820
 Ramos, F. M. 417, 428, 6432, 6433
 Ramos, G. 5206
 Ramu, P. M. 6397, 6399
 Ramzan, M. 9174
 Rana, O. S. 859, 4820
 Ranadive, A. S. 1031, 7463
 Rancheva, Ts. 5379, 8831
 Randhawa, G. S. 2512, 4819, 6295, 6297, 7204, 7216
 Randhawa, K. S. 165, 5650, 7075, 7982, 8663, 8664
 Randhawa, N. S. 7138, 9087
 Randhawa, S. S. 8321
 Rangan, T. S. 794
 Ranganathan, V. 1630, 8271
 Rangaswami, S. 4753
 Ranieri, M. de . 3592
 Rankov, V. 237, 8776
 Ranković, M. 6683
 Rantcheva, Tz. 8831
 Rao, B. B. R. 3210
 Rao, B. G. V. N. 6256
 Rao, B. S. 844, 8183, 9214
 Rao, B. V. R. 3225
 Rao, C. K. 6
 Rao, C. V. N. 4781
 Rao, G. N. 8213, 8275
 Rao, K. H. 808
 Rao, K. K. P. 7244
 Rao, K. R. A. 9163
 Rao, M. R. 8213
 Rao, N. S. P. 7119
 Rao, P. H. 8213
 Rao, P. S. 3038, 6256, 7086, 7871
 Rao, P. V. N. 8213
 Rao, P. V. R. 8213
 Rao, R. V. K. 4666, 9062
 Rao, S. D. T. 8048
 Rao, S. N. 839
 Rao, T. R. 9175
 Rao, T. S. 5317
 Rao, V. G. 6993, 8966
 Rao, V. J. M. 7750
 Rao, V. N. M. 1281, 4045, 8569
 Rao, V. R. 2849, 6297
 Rao, W. K. 1572
 Rao, W. K. M. 398
 Raouf, M. 5633
 Rapava, L. P. 7662
 Raper, C. A. 3825
 Raper, J. R. 3825
 Rapoport, H. 6307
 Rapp, L. 7796
 Rapparini, G. 5292, 5734
 Rasi Caldognio, F. 8727, 8728, 8729
 Rašić, P. 6544

- Rasing, J. 1716, 4953
Raski, D. J. 5132, 5133, 7573, 8534
Raskin, R. S. 6929
Rasmussen, C. R. 7833
Rasmussen, E. 1364
Rasmussen, G. K. 2405, 8085
Rasmussen, H. P. 316, 6885, 7431
Rasmussen, K. E. 3024
Rasmussen, S. 3024
Rasmy, A. H. 29, 72, 366
Rasoanaivo, P. 770
Rassis, A. 5548
Rassomakhina, N. G. 2002
Rast, A. T. B. 6082
Rast, D. 8827, 8828
Rastogi, K. B. 7663
Rastogi, R. P. 2336, 8008
Rasulev, U. U. 1183
Ratana, G. 8187
Rath, C. R. 4125
Rath, G. C. 1274
Rath, N. 6698
Rathore, D. S. 3221
Ratskevich, S. K. 6893
Rattink, H. 7903
Rauch, F. D. 708
Raulston, J. C. 6144, 6977, 7009, 8852, 8860
Rausser, W. E. 7704
Ravasz, L. 4061
Ravel, P. 8127
Ravelli, V. 2781, 5373
Raven, C. W. 3752, 4505
Ravindranath, B. 526
Ravisé, A. 3788
Rawlins, W. A. 1255
Ray, L. P. K. 1452
Ray, P. M. 7736, 7737
Raychaudhuri, S. P. 889, 3316, 7086, 8058
Rayment, A. F. 3532
Raymundo, L. C. 5365
Raza, S. H. 7749
Razeto M., B. 3471
Read, P. 3917
Read, P. E. 713, 6073
Rebelo, M. C. 9172
Rebois, R. V. 7771
Recalde, L. 6693
Reckin, J. 6306
Reckrühm, I. 936
Reda, F. 7100
Rédaï, I. 6776
Reddy, B. R. 8048
Reddy, D. N. R. N. 5489, 6252
Reddy, M. N. 8718
Reddy, P. J. 3210
Reddy, S. M. 1526, 4869
Reddy, V. S. 7244
Reed, D. K. 5565
Reeder, W. F. 1464, 4873, 8101
Reedijk, A. 87
Rees, A. F. 2898
Rees, A. R. 1365, 3296, 3872, 3875, 5431, 6187, 7011, 8882, 8906
Rees, T. ap 694, 5964, 7741
Reese, R. L. 3115
Reeves, S. R., Jr. 2179, 5448
Refatti, E. 1114
Regazzi, D. 1847, 5063
Rege, D. V. 8761
Rehfeld, D. W. 1959
Rehkugler, G. E. 54
Reich, W. 6476
Reichel, M. 900, 932, 7403
Reid, J. S. G. 3053
Reineccius, G. A. 2446
Reinert, R. A. 5178
Reinhard, E. 9051
Reinherz, D. 3993
Reis, A. 8844
Reis, M. S. 172
Reisch, J. 4775, 9038, 9056
Rejman, A. 7333
Rejman, S. 8371
Rekvava, Kh. S. 3099
Remaudière, G. 1022
Remizova, G. K. 4384
Rémy, P. 2158
Renard, J.-L. 8164
Renard, W. 6698
Renaud, C., J. 8690
Rendell, J. 6654, 6698
Renedo, J. 1453
Renfrow, A. 305
Rensburg, H. J. van 4469
Rensenbrink, W. J. 7926
Rennall, S. 4431, 4438
Renzoni, G. C. 279
Reppo, E. 293
Rest, J. A. 4736
Retief, W. L. 5192
Retig, N. 2777
Retina, T. A. 8964
Rettig N. 2816
Retuerma, M. L. 4798
Reuff, B. 865
Reuther, W. 6328, 6334, 8099
Reuveni, O. 809
Reuveni, R. 8781
Revilla, A. P. de 8788
Revyakina, N. T. 7338
Rey, P. 6285, 7985, 7991
Reyes, A. A. 8621
Reyes E., H. 8132, 9140
Reyes, L. C. de 9140
Reynolds, B. D. 537
Reynolds, H. W. 4002
Reynolds, S. G. 5611
Řezáč, A. 6159
Řezníček, V. 2523, 2893, 5323
Reznickova, S. A. 2948
Reznickova, S. A. 292
Rezvaya, E. A. 6312, 8039
Rhaiem 4027
Rheume, B. 8768
Rhee, I. D. 1995
Rheades, H. L. 5927
Rhode, R. A. 3316
Rhode, R. H. 5623
Rhodes, L. J. 2478
Rhodes, M. J. C. 5934
Rhodesia, Ministry of Agriculture 3308
Rhodesia, Secretary for Agriculture 4149, 4364, 4829
Ri, C. Y. 9049
Ribaillier, D. 9216
Ribeiro, F. A. 390
Ribeiro, R. de L. D. 4528, 4533, 5328
Ricard, J. 6659
Ricardo, C. P. P. 694
Ricardo Vilanova, J. 7718
Ricaud, C. 6444, 8221
Ricaud, R. 8205
Riccardi, S. 6379
Ricci, P. 1010
Rice, E. R. 8195
Rice, H. V. 1673
Rice, R. E. 81, 1837
Rice, R. M. 280
Rich, A. E. 313, 4715, 6211
Rich, S. 6569, 7380
Richard, H. M. J. 1404, 7069
Richards, J. F. 4089
Richards, M. 4687
Richardson, F. E. 7238
Richardson, L. T. 7731
Richardson, M. 255
Richens, K. 6338
Richmond, A. E. 1978
Richter, E. 7810
Richter, G. 709
Richter, M. 3440
Richter, R. 5272, 5273
Rickard, P. C. 5377
Ricketts, M. E. 6779
Ridings, W. H. 2974
Riekels, J. W. 7773
Riepma, P. 7621, 7643
Ries, S. K. 2130
Riess, C. M. 9258
Riesselman, J. H. 722
Rife, C. F. 4335
Rigby, B. 5093
Riggenbach, W. 1766
Rigor, E. C. 4779
Rijven, A. H. G. C. 3976, 4776, 8044
Rikhter, A. A. 8332
Ril', T. R. 4716
Rimikhanov, A. A. 8783
Ríos C., D. 8052
Ríos-Castaño, D. 1461
Rios, V. M. 2103
Ripaldi, C. P. 1209
Rippon, L. E. 829
Rišňovská, H. 3926
Ristanović, M. 6657
Risteviski, B. 3489, 4270, 5714, 6629, 7447
Ritchie, E. 335
Ritter, C. M. 3392
Ritter, M. 4931
Rivadeneira, V. H. 731
Rivalta, L. 3485
Rivas, D. 5302
Rivera Brenes, A. 5658
Rivera-Ortiz, J. M. 1587
Rivero U., W. 4563
Rives, M. 585, 5853
Rivier, L. 7097
Rivlin, A. 3868
Rizaev, R. M. 1718
Rizk, A. M. 3023
Rizvi, S. A. I. 1426
Rizzotto, N. 4207, 4343, 5341
Rjabschun, O. P. 7544
Roach, F. A. 3369
Robbins, M. L. 3680, 3817
Robbins, R. T. 645
Robbins, W. J. 8929
Robbs, C. F. 915, 4528, 4533, 8748
Robert, Y. 3635
Roberts, A. N. 2657
Roberts, D. A. 1559
Roberts, F. M. 1577, 1578, 2806
Roberts, G. R. 6468, 6469
Roberts, H. A. 1164, 6779, 6879
Roberts, R. 6814
Roberts, S. 3702
Robertson, J. S. 1138
Robertson, W. R. 7164
Robin, J. 7174
Robinson, C. 5427, 5428
Robinson, D. 6601, 6602
Robinson, D. E. 4997
Robinson, F. E. 116
Robinson, J. E. 229, 1077
Robinson, R. W. 634, 635, 5967
Robinson, W. B. 5108, 5233
Robison, W. H. 8245
Robitaille, H. 4220
Rocha, H. M. 3183, 4845, 4846
Rocheoust, E. 8121
Rochelle, L. A. 6393
Rochow, W. F. 3316
Rodaway, S. J. 2073
Roddick, J. G. 2129
Rode, H. 1765, 7383
Rodella, A. A. 3260, 7287
Rodionov, V. S. 6092
Rodney, D. R. 4002
Rodney, R. 8063
Rodrigues, C. J. 1580
Rodriguez, B. 1354
Rodriguez, E. 3035
Rodriguez, E. 6286
Rodriguez Enriquez, M.-J. 8600
Rodriguez Fuentes, M. E. 5605
Rodriguez, H. 406, 3939
Rodriguez, J. G. 1291
Rodriguez Luis, F. 8000
Rodriguez, R. C. 6218
Rodriguez V., A. E. 4257
Roe, B. 9104
Roemer, K. 2608, 7406
Roest, S. 9012
Rogers, B. L. 2644
Rogers, C. E. 5269
Rogers, E. 3470, 4977, 8457
Rogers, I. S. 3301
Rogers, P. F. 8220
Roggen, H. P. J. R. 1175
Rogler, C. E. 6217
Rognon, F. 1557, 5615, 6398
Roh, S. M. 3870, 4658
Rohde, J. 2203
Rohrbach, H. 1379
Rohrbach, K. G. 375, 5780
Roistacher, C. N. 794, 6328, 6345, 7141
Rojas M., L. A. 8951
Røkholt, P. O. 4133, 5387
Roland, J.-C. 3768
Rolland 1153
Rolli 2163
Rollin, P. 2766, 3861, 5208, 5687
Rolz, C. 3174
Rom, R. C. 1012, 3510, 4256, 8462
Romagnolo, M. 3780
Romanenko, N. 8533
Romano, S. 8424
Romanov, N. P. 3429
Romanova, G. T. 5047
Romanowski, R. R. 4886
Romanshchak, S. P. 2542
Romeiko, I. N. 1229
Romero, J. 200
Romney, D. H. 1568, 4054, 4854
Romney, E. M. 6479
Rondador, I. 5126, 6730
Ronchi, V. N. 139
Rondina, R. V. D. 2348, 3964, 9043
Rondón G., A. J. 9071
Rongen, P. 2146
Roodich, Y. 3692
Roorda van Eysinga, J. P. N. L. 1143, 5345
Roos, E. E. 192, 639
Rooy, M. De 2259
Rosa, A. G. dela 8078
Rosati, P. 2694, 2695, 3542, 3547
Rosazza, J. 2345
Rosazza, R. 3572
Rosciglione, B. 815
Roselli, G. 7290
Rosenberg, D. 3645
Rosenblum, J. 3784
Rosenstiel, R. G. 1076
Rosenthal, R. N. 8863
Ross, E. 2435
Ross, J. D. 8448
Ross, J. P. 4472
Ross, R. G. 53
Rossi-Compostella, I. 8526
Rossi, H. H. 5418
Rossi, N. 5681
Rossier, L. A. 7257
Rossol, R. 7090
Rostron, H. 408, 7256
Rotar', A. I. 5744
Rotem, J. 8781
Roth, G. 415
Roth, I. 4856
Roth, P. L. 98
Rothbacher, H. 325
Rother, A. 768
Rotov, R. A. 4668, 5440
Rottenburg, W. 2935
Rottink, B. A. 2983
Rouanet, G. 170, 5322
Roughan, J. A. 4389
Roughan, P. G. 2072
Rourke, J. P. 395, 396
Rourke, J. P. 1397
Rousseau, G. G. 8417
Roussel, C. 8562
Roussel, P. 6021
Rousselle, R. 8102
Rout, B. K. 1274
Routchenko, W. 6479
Roux, F. Le 2682
Roux, M. S. Le 4340
Rouze-Jouan, J. 3635
Rovira, A. D. 6479
Row, L. R. 7119
Rowan, K. S. 6944
Rowe, H. F. 7623
Roy, A. K. 8782
Roy, A. R. 7173
Roy, B. N. 1499
Roy, D. N. 1452

- Roy, M. K. 2601
 Roychoudhury, N. 3226
 Royle, D. J. 5510, 6277
 Rozanski, A. 4763
 Rozov, N. F. 2901, 6802, 8617
 Róza, Z. 9056
 Rozsnyai, Z. 7423
 Rozumna, O. D. 5815
 Ruban, N. G. 1893
 Rubatzky, V. E. 3636
 Rubin, B. 4468, 5888
 Rubin, B. A. 5935
 Rubtsov, N. I. 862
 Rubtsov, V. V. 3391
 Rubtsova, N. I. 934
 Rücker, G. 769
 Rudenko, K. N. 5699
 Rudenko, N. M. 6822
 Rudić, M. 3385, 3386, 6545, 6626
 Rudich, J. 1199, 2777, 3688, 5227
 Rudnicki, R. 3380
 Rudolph, K. 168, 4928, 5248
 Rudolph, M. J. 7029
 Rüegg, E. F. 5349
 Ruelke, O. C. 4088
 Rueveni, O. 8106
 Rufer, R. 1174
 Ruffaldi, G. B. 4823
 Ruffner, F. 2055
 Ruggeri, D. 6499
 Ruggieri, G. 5559
 Rui, D. 45
 Ruinard, J. 2471
 Ruissen, J. 6596
 Ruiter, D. de 8815
 Ruiz de Montalvo, M. C. 1587
 Ruiz, S. E. 3700
 Rumania, Centre d'Information et de Documentation pour l'Agriculture et la Sylviculture 8281
 Rumi, C. P. 4647
 Rumpel, J. 6032, 7604
 Rumyantseva, V. I. 5941
 Rundans, V. 4236
 Rundle, D. L. 2301
 Rüniger, W. 309, 6200, 7858, 8925
 Rungie, J. M. 148, 149
 Rungsiyakul, D. 9042
 Runkova, L. V. 6987
 Rupprecht, H. 2291
 Ruscoe, C. N. E. 4121
 Rusmini, B. 134
 Russ, R. D. 5798
 Russell, G. F. 1414, 7979
 Russell, R. S. 3296, 8308
 Russo, F. 5549
 Russo, M. 4487
 Rust, D. J. 4259
 Ruswanda 5663, 8273, 8274
 Rutger, J. N. 5238
 Ruth, J. M. 222
 Rutherford, P. P. 7759
 Rutland, R. B. 3854, 8865
 Rutledge, A. D. 545
 Rutten, P. 2640
 Ryabov, I. N. 7454
 Ryadnova, I. M. 76, 1014, 7444
 Ryall, A. L. 5167
 Ryan, C. A. 2855, 8790
 Ryan, E. 6908, 6909
 Ryan, E. W. 2900
 Ryan, G. F. 4702
 Ryass'kiĭ, V. 5031
 Rybáček, V. 344
 Rybáček, V. 5505
 Rybáček, V. 5506
 Rybakov, A. A. 1718
 Ryban, G. 5135, 5136
 Ryden, K. 3844
 Rygg, G. L. 1512, 5581
 Rygg, T. 4429
 Rykalin, F. N. 914
 Rylko, M. 230
 Rylov, G. P. 5048, 5785
 Rylski, I. 2850, 4541, 5326, 5327, 6889
 Ryu, K. S. 1446, 2304
 Ryugo, K. 2632, 4357, 5707, 5761
 Ryzhkov, A. P. 8372
 Ryzhova, E. F. 7055
 S., C. G. 1621
 S., P. C. 854
 S., S. K. 3269
 Saadany, G. B. El 2396
 Saas, P. 2598
 Sabah, Department of Agriculture 8582, 9075, 9135
 Sabaratnam, S. 4907
 Sabashvili, G. K. 3159
 Sabharwal, P. S. 2271
 Sabri, N. N. 6301, 6302
 Sacalis, J. N. 2296
 Sachl, J. 343, 3043, 7089
 Sachs, M. 6698, 6708, 8524
 Sachs, R. M. 4610, 4685
 Sachs, T. 3008, 5972
 Sadan, D. 3307
 Sadana, G. L. 1488
 Sadasivam, R. 3150, 4044, 9106
 Sadvivasam, R. 3210
 Sadleder, D. 5989
 Sadykhov, D. M. 7801
 Saeed, A. 2455
 Saelens, W. 3641
 Saettler, A. W. 1213, 2021
 Safrai, B. 3923
 Safran, B. 8572
 Safran, H. 3998, 6333
 Saga, K. 2080, 8752
 Sagar, G. R. 214, 6011
 Sagawa, Y. 712, 1380
 Sági, F. 6662, 6678, 7510
 Saha, A. K. 433, 3210, 9176
 Saharan, G. S. 7706
 Sahashi, Y. 8637
 Sahay, B. N. 9224
 Sahoo, A. C. 8739
 Sahulka, J. 4509, 6010, 7732
 Said, H. M. 491
 Said, H. M. 507
 Said, M. 7344
 Saidak, W. J. 1819, 7452
 Saidi, M. T. El 2027
 Saifur-Rahman. 1402
 Saifur-Rahman 3055
 Saikia, B. K. 7974
 Saimbhi, M. S. 233, 7765, 8666
 Saini, N. K. 7251
 Saini, S. S. 6438, 7663, 9178
 St. Lucia, Ministry of Agriculture, Research Division 8056, 8577
 Saito, S. 2744
 Saito, T. 2132, 4393, 6931
 Saivara, K. 853
 Sakaguchi, S. 7140
 Sakai, A. 4342, 5835
 Sakai, R. 7654
 Sakai, S. 4112
 Sakai, W. S. 176
 Sakaikbara, M. 8071
 Sakariah, K. K. 8094, 8095
 Sákő, J. 2738, 8484
 Saksena, S. B. 788
 Sakshaug, K. 2489
 Sakurai, H. 4475
 Sakurai, N. 8599
 Salama, H. S. 399, 799, 811, 2397, 3134, 9179, 9180
 Salamin, F. 8704
 Salardini, A. A. 7135
 Salas, G. 3775
 Salazar C., R. 1461, 8052
 Salazar, J. A. 308
 Sale, P. 5080
 Saleh, M. 3081, 9037, 9058
 Saleh, M. R. 399
 Saleh, M. R. I. 778
 Saleem, S. A. 494, 1122
 Salerno, M. 815, 4802
 Salgado, M. L. M. 8140
 Salih, H. S. A. 5346
 Salleo, S. 2645, 7436
 Salminen, S. 7176
 Salo, M. -L. 60
 Salo, M. -L. 101
 Salter, P. J. 1163, 3667, 3669
 Salud, E. H. 4779
 Salunkhe, D. K. 1298, 2012, 2070, 4485, 5995, 6104, 7326, 8803
 Samajpati, S. 4781
 Samananda, N. 4623
 Samarawira, I. 327, 8832
 Samarina, L. N. 649
 Sambamurthy, K. 7078
 Samish, R. M. 1925, 6479
 Sammes, P. G. 8960
 Samoilenko, B. S. 118
 Samokhvalov, G. I. 7738
 Samol, H. H. 8244, 9259
 Samorodova-Bianki, G. B. 4228, 7417
 Sampath Kumar, P. S. 3069
 Samperi, A. M. 7303
 Samson, J. A. 6119
 Samsonov, A. M. 6747
 Samuels, G. 2474, 7218, 8200, 9265
 Sanchez, M. 3174
 Sanchez Nieva, F. 1538
 Sánchez Potes, A. 389, 3189
 Sánchez Puente, L. de la 6701, 6702, 6703
 Sandanam, S. 5359
 Sanderson, G. W. 1665
 Sanderson, K. C. 4718
 Sanderson, S. 2942
 Sandhoo, S. S. 7425
 Sandhu, B. S. 4008
 Sandhu, J. S. 426, 7247
 Sandhu, K. S. 5629
 Sandhu, M. S. 1993, 6828
 Sandhu, S. S. 4095, 8223
 Sandina, I. B. 5533, 6313
 Sandved, G. 4650, 5420
 Sandved, M. 2916
 Sandwell, I. 3822
 Sang, C. K. 5189
 Saniewski, M. 8400
 Sanikidze, A. B. 8115
 Sanikidze, V. I. 3265
 Sankaranarayanan, P. 1618
 Sankhla, D. 3647
 Sankhla, N. 3647
 Sano, H. 138
 Sansavini, S. 61, 1849
 Şantamur, F. S., Jr. 7038
 Şantavý, F. 5517
 Santhanam, P. S. 2340
 Santhanaraman, T. 5223
 Santos, A. C. dos 9172
 Santos, M. A. C. dos 5890
 Santra, D. K. 3015
 Sanwal, G. G. 9134
 Sanyal, D. K. 855
 Saoji, A. N. 4773
 Sapozhnikov, D. I. 7055
 Saracco, C. 5107
 Sarawak, Department of Agriculture, Research Branch 3609, 3933, 4036
 Sardjono 5663, 8274
 Sardzheladze, G. P. 3159, 3262
 Sargent, J. A. 2032, 7632
 Sarger, J. 4232
 Sarkisova, M. A. 6296
 Sarkisova, S. O. 7583
 Sarma, A. K. 7173
 Sarma, M. N. 7244
 Sarma, Y. R. 4096
 Sarmeitno, R. 9112
 Sarmiento, R. 8112, 9111
 Sarruge, J. R. 3197, 3200, 4381
 Sarti, D. 1848
 Sarwar, M. 336, 8993
 Sarykulov, O. 7483
 Sasaki, S. 1398
 Sasaoka, K. 5288, 7744
 Sasa, B. 2687, 7497
 Sass, P. 4198, 6585
 Sasser, J. N. 445
 Sastry, K. S. 4096
 Sastry, K. S. M. 8786
 Sastry, S. D. 6995
 Satarova, N. A. 2802
 Satarova, S. N. 8430
 Sathiamma, B. 1562, 8142, 9156, 9157, 9159
 Sathiamorthy, A. S. 853
 Satish, S. 1451
 Sato, K. 6479
 Sato, M. 1828, 2750
 Sato, N. 2696
 Sato, P. T. *8015
 Sato, T. 2430
 Sato, Y. 1835, 4774
 Satsyperova, I. F. 4772
 Satter, R. L. 6235
 Satyabalan, K. 1567
 Satyanarayana, G. 1913, 8551
 Satyanarayana, Y. 1636
 Sauer, K. 7708
 Sauer, M. R. 1095
 Sauls, J. W. 1827
 Saunders, J. P. F. 3743
 Saure, M. 460, 1728, 3378, 8335
 Saussay, R. 8597
 Sauthoff, W. 3325
 Sautin, V. I. 7512
 Savage, E. F. 5027
 Savchuk, L. P. 7990
 Savel'ev, N. I. 2530
 Savin, E. Z. 2544, 4179
 Savina, A. A. 3975
 Savirskii, Yu. N. 465
 Savov, T. 7815
 Sawamura, K. 7379
 Sawayama, S. 3160
 Sawhney, N. 7883
 Sawhney, S. 7883, 7884
 Sawhney, V. K. 1300, 2884, 3816
 Saxena, B. N. 6203
 Saxena, H. K. 3121
 Saxena, M. M. S. 7237
 Sayanova, V. V. 4486
 Sayavedra, G. A. 3804
 Sayed, G. E. K. 8259
 Saylor, L. C. 5461
 Sayyad, S. M. El 3079
 Sazena, D. B. 8998
 Sazonova, L. V. 4435
 Scagliarini, A. 1242
 Scaife, M. A. 5183, 8610
 Scalopi, E. J. 3757, 5296, 5297
 Scaramuzzi, F. 570, 4359, 6376
 Scarborough, I. P. 3264
 Scarisbrick, D. H. 8676
 Scarpellino, R. 4400
 Schaap, C. 7621
 Schacht, W. 6125
 Schade, C. 7321
 Schade, J. 7330
 Schaefer, H. 5830, 7579
 Schaefers, G. A. 1887
 Schaeer, E. 5760
 Schäfer, E. 8910
 Schäfer, K. 3895
 Schalk, A. 5085
 Schaller, C. C. 520
 Scharlemann, W. 9053
 Scharpé, A. 6867
 Schätzke, M. 895, 896
 Scheer, H. A. T. van der 1798
 Scheer, H. A. T. van der 5009
 Scheibe, J. 5180
 Schein, R. D. 8689
 Scheinmann, F. 9040
 Schekel, K. A. 5401
 Schenck, N. C. 5219
 Schenk, P. C. 5427
 Schenk, P. K. 3864
 Schenk, W. 5139
 Scherer, J. R. 6369
 Scherzer, S. 6479
 Schickedanz, F. 2880
 Schickluna, J. C. 2490
 Schieber, E. 3203
 Schieber, E., Lewis, F. H. 3316
 Schiecht, H. M. 3887
 Schifani, C. 357
 Schiff, P. L., Jr. 2360
 Schiffmann-Nadel, M. 358, 369, 1465, 1506, 2377, 3153, 6347, 7152
 Schik, K. E. 2945

- Schilcher, H. 3637
Schimanski, H.-H. 7321
Schimmelpfeng, H. 2693
Schirmer, M. 8510
Schisler, L. C. 5380
Schiva, T. 7892
Schlösser, E. 1541, 2395, 2455, 4833, 5464
Schmalscheidt 8947
Schmaus 2907
Schmelzer, K. 6276, 6781, 7637
Schmid, H. 1724
Schmid, R. 2483
Schmidle, A. 6566
Schmidt, E. 561, 4690, 7050
Schmidt, G. 4612, 8414
Schmidt, H. E. 6276
Schmidt, R. E. 2264, 5443
Schmidt, S. 7401
Schmitt, A. 1128
Schmitt, L. 865
Schmitt, O. 2075
Schmitt, R. V. 5133, 7573, 8534
Schmittz, K. J. J. 6593
Schmutterer, H. 8717
Schneider, E. A. 250, 251
Schneider, E. F. 4703
Schneider, G. 3165, 4824
Schneider, R. 2236
Schneiderreit, M. 6124, 6958
Schnell, H.-E. 7862, 7888
Schnell, R. 9120
Schoch, P. G. 2095
Schödel, S. 5155
Schoeneweiss, D. F. 6211
Schöffling, H. 5116, 8549
Scholefield, P. B. 6765
Scholten, G. 1338
Schomer, H. 3425
Schönberg, G. 1735, 7359
Schoneveld, J. A. 2764, 3639, 6114
Schönhard, G. 865
Schönherr, J. 1218
Schönthaler, K. E. 3892
Schoorl, D. 5754
Schopfer, J.-F. 1115
Schopfer, P. 5687
Schrauwen, J. A. M. 3851
Schrauwen, J. A. M. 275
Schreader, W. R. 5022
Schreiber, L. R. 1146
Schreurs, J. 8184
Schrüder, E. 5889
Schrüder, J. 5155
Schrodt, W. 5830
Schroeder, C. 294, 3877
Schroeder, W. T. 2817
Schroth, M. N. 5787
Schruff, G. 3586, 4350
Schuiling, M. 4054
Schulte, K. E. 769
Schultz, I. 7989
Schulze, E.-D. 8426
Schumacher, R. 1784, 1796, 4223, 6576
Schuphan, W. 2903, 7308
Schuricht, R. 917, 918
Schuster, M. L. 722, 2022, 2023, 7696
Schütte, H. R. 2308
Schütte, K. H. 8967
Schwabe, W. F. S. 5733
Schwabe, W. W. 4677
Schwartz, A. E. 768, 776
Schwartz, A. 6349, 6388, 9095
Schwartz, C. D. 8504
Schwartz, M. 2882
Schwarzenbach, H. 5104
Schwarzenbach, W. 904, 8324
Schwemmer, E. 8298, 8893
Schwenker, K. P. 4617
Schwimmer, S. 1299
Sciaroni, R. H. 6139, 6146
Scienza, A. 558
Sciortino, A. 106, 1880
Scogin, R. 255
Scora, R. W. 4745, 4746, 6331, 6345
Scott, D. H. 1874, 2670, 4321, 5090
Scott, K. J. 483, 487, 898, 1794, 1797
Scott, M. 2170, 6141
Scott, T. K. 1673
Scuderi, A. 4794
Seager, J. C. R. 746, 1332
Seal, D. T. 7035
Seaman, F. C. 2942
Seamount, D. T. 2408
Seawright, K. W. 8865
Šebánek, J. 3748, 4510
Sebestyén, R. 3628
Seçmen, Ö. 3096
Sedlarska, B. 8537, 8550
Sedov, E. N. 5699
Sedova, Z. A. 5699
Sedykh, N. V. 5278
Seefeld, F. 7988
Seem, R. C. 1211
Seemann, J. 2497
Seemanthani, B. 6810
Seeschaaf, K. W. 384
Seetoh, H. C. 6210
Seeyave, J. 2382
Segal, N. 9069
Segal, R. 6314
Sehgal, C. B. 1447
Seidel, H. 1876
Seidel, M. C. 3334
Seidl, V. 3406, 4984
Seifer, H. 9069
Seifert, J. 3330
Seike, K. 6639
Seitz, P. 1945
Seitz, U. 4734
Sekita, N. 1780
Self, R. 6783
Self, R. L. 4686
Seligmann, O. 2371
Selimi, A. 3492, 4263
Sell, H. M. 1197, 1198, 2006
Selman, I. W. 5359
Selochnik, N. N. 2959
Selvaraj, Y. 6295, 6297, 8021, 8127
Selvendran, R. R. 3283, 4907, 6462, 6464
Selvendran, S. 3283, 6462
Semakin, V. P. 5699
Semancik, J. S. 363
Semangoen, H. 5621
Semeniuk, P. 317, 2940, 6996, 8877
Semenov, A. Ya. 955
Semenov, N. I. 5700, 5701
Semenova, G. G. 6589
Semenyuk, G. M. 6552
Semichev, V. N. 4565
Semikhatova, O. A. 2060
Semina, N. P. 2555, 2567, 6532
Semkin, V. I. 4513
Semkina, L. A. 2998
Semochkina, L. G. 2534
Semrád, S. 2908
Sen, A. 1664
Sen, A. B. 5530
Sen, B. 3316
Sen, D. N. 8657
Sen, P. K. 3219, 3226, 3233, 3235, 3236, 3239
Sen, S. K. 2926
Sena-Silva, M. do S. 9168
Senchenko, G. G. 763
Sengalevich, G. 6677, 8784
Sensor, F. 7091
Sento, T. 2415
Seow, C. C. 8130
Seow Chee Choon 4837, 8130
Sepasgosarian, H. 1695
Sequeira, L. 4403
Sequeira, O. A. de 5853
Serafimov, S. S. 2533, 4165
Serafini, G. 5126, 6730
Serapión, J. L. 8255
Serebryakova, N. V. 2990, 2993
Sereni, S. 998
Sergeev, L. M. 5701
Sergent, G. 6777
Serini, G. 1137
Serpukhovitina, K. A. 5701
Serra, G. 6028, 6175
Seshadri, A. R. 7762
Seshadri, T. R. 346, 353, 526, 758, 766, 3069, 4717, 4765, 8276, 9005, 9047
Seth, M. L. 6050
Setliff, E. C. 8392
Setterfield, G. 5314, 8736
Seutin, E. 6942
Sevcenco, V. 8478
Sevenet, T. 2365
Sewell, A. P. 7759
Sewell, G. W. F. 3325, 9009
Sexton, O. J. 382
Sexton, R. 5282
Seyffert, W. 285, 6997
Seymour, C. P. 1559, 2269, 3002
Seymour, R. S. 7935
Sfakiotakis, E. M. 1363, 7010
Shabbir, G. 1619
Shabrawy, O. A. El 4495
Shadrina, L. S. 2556
Shafi, M. 609, 1176, 2837, 2890
Shafi, M. M. 5914
Shafrir, M. 3986
Shagina, T. V. 3426
Shah, C. S. 2332, 3085, 4757, 4758
Shah, J. J. 2912
Shah, N. C. 7065
Shah, V. J. 8096
Shaikh, N. B. 1634, 8222
Shaikh, Z.-ud-D. 7749, 7761
Shalamberidze, N. Sh. 1759
Shalitin, G. 3583
Shalucha, B. 3850
Shamanaeva, T. N. 5356
Shamy, A. M. El 3049
Shanimov, Kh. I. 48
Shankaranarayana, M. L. 332, 6247
Shanks, C. H., Jr. 2684
Shanks, J. B. 2280, 7052
Shanmuganathan, N. 5662, 6460
Shanmugavelu, K. G. 4045
Shanmugham, A. 697
Shanmughavelu, K. G. 1281
Shannon, S. 5967
Shanta, P. 1560, 6402, 9153
Shapovalov, V. I. 2719
Sharaf, A. 4495, 6470
Sharma, A. 266
Sharma, A. B. 3222
Sharma, B. L. 6445
Sharma, B. N. 7972
Sharma, C. B. 8777
Sharma, D. K. 3210
Sharma, D. N. 3243
Sharma, H. C. 8011
Sharma, J. C. 3665
Sharma, K. R. 2849
Sharma, N. D. 766
Sharma, O. P. 4529, 7274
Sharma, P. L. 7476, 7971
Sharma, P. P. 7663
Sharma, R. A. 7807
Sharma, R. C. 1416
Sharma, R. D. 9126
Sharma, R. K. 143, 1011, 5434, 5624, 5977
Sharma, R. L. 7545
Sharma, S. K. 7251
Sharma, V. K. 1152, 4354, 4818, 5207
Sharov, R. F. 563
Sharova, N. I. 7327
Sharova, N. L. 7857
Sharp, W. R. 6929
Sharpe, R. H. 1067, 4242, 6527
Sharples, D. 2208, 2209
Sharples, G. C. 1484
Sharples, R. O. 7407, 8318
Shatiliv, I. S. 6802
Shatilov, I. S. 2901, 8617
Shatkovskii, T. A. 6573
Shaulis, N. J. 1127, 6728
Shaumyan, I. K. 5881
Shavishvili, L. M. 3286
Shavrov, L. A. 8965
Shaw, G. W. 8422
Shaw, J. G. 5565
Shaw, P. E. 2412, 4023
Shawkat, A. L. 8491
Shay, F. J. 3
Shaybany, B. 2867
Shcheglov, N. I. 7313
Shcherbakova, L. T. 3293
Shcherbatyuk, L. K. 581
Shchibrya, G. I. 2989
Shchigel'skii, O. A. 5531
Shchiori, Y. 4549
Shear, C. B. 922, 1771, 4201, 4981, 6479
Sheard, G. F. 2166, 3296
Sheberstov, V. V. 3972, 7112
Shein, T. 5994
Sheir, H. M. 4456
Sheldrake, A. R. 706
Sheldrake, R., Jr. 6495, 8861
Shellard, E. J. 2363, 2364, 5526, 9042
Shelton, J. E. 4203
Shen, R. S. 4049
Shen, R.-S. 9144
Shende, S. T. 1664
Shenk, M. D. 2442
Shepel's'ka, O. G. 4180
Shepherd, K. 1537
Sher, S. A. 2288
Sherbeeney, M. R. El 5168, 5172
Sherer, V. A. 3590
Sherer, V. O. 8539
Sheridan, K. P. 442
Sherman, W. B. 1067, 3484, 4242, 6527
Sherstenikina, A. V. 5091
Sheta, I. B. 7322
Sheth, K. 8028
Shevyakova, N. I. 2815
Shibata, S. 3068, 5527
Shibuya, F. 2288, 3014, 5221
Shibuya, H. 7140
Shibuya, M. 4108
Shifrin, Yu. 8732
Shiga, Y. 2080, 8735
Shigaeva, M. Kh. 6792
Shigematsu, K. 7001
Shigeva, G. T. 6374
Shigo, A. L. 6211
Shih, S.-C. 7253
Shih-Tien Hsu 5247
Shikhmany, S. D. 1913, 8551
Shildrick, J. P. 7918
Shilo, R. 4655, 8892
Shim, K.-K. 2571, 7398
Shimabukuro, R. H. 1650
Shimada, N. 1997
Shimada, T. 4475
Shimizu, T. 4592, 6352
Shimizu, Y. 5880
Shimokawa, K. 8126
Shimokoriyama, M. 1305, 4592
Shimosako, Y. 7140
Shimura, I. 2430, 8447
Shin, G. C. 2148
Shin, K. C. 2147, 3826
Shindy, W. W. 8567
Shingarey, M. K. 3257
Shingu, T. 5570
Shininger, T. L. 2823
Shinji, E. 1024
Shinozaki, M. 3848
Shipchandler, M. T. 2372
Shipton, J. 4826
Shirasaki, S. 1780
Shirkanova, V. G. 8415
Shirko, V. N. 621, 6900
Shiroma, M. 8174
Shishkanu, G. V. 6573
Shishkina, L. A. 8695
Shishkov, S. 1907
Shivashankar, K. 238
Shivashankar, Y. T. 814
Shivashankara, K. T. 3578
Shkhvatsabaya, G. Ya. 3285
Shkreba, V. C. 6537
Shlyapnikov, S. B. 8347
Shmueli, M. 3624, 4376, 4448, 4537, 6891
Shoabi, A. M., El-M. 3079
Shoferistov, E. P. 7440

- Sholokhova, V. A. 3097
Shomosh, A. 5881
Shone, M. G. T. 5081
Shorey, H. H. 5929
Shorokhov, S. S. 5699
Short, K. C. 6017
Short, T. H. 2113, 2114, 2863, 2864, 2886, 3396, 5363, 5364, 5908
Shorthill, M. J. 49
Shortle, W. C. 4715
Shoulders, J. F. 2264
Showalter, H. D. H. 2372
Showalter, R. K. 5264
Shreemali, J. L. 1526
Shreter, G. K. 2358
Shrivastava, S. S. 9200
Shropshire, W., Jr. 5687
Shtefyrtse, A. A. 5717
Shterenberg, P. M. 3568
Shubina, L. S. 764, 7369
Shuh-Wei Hwang 5378
Shukla, D. D. 5164
Shukla, R. 4098
Shukla, R. N. 9134
Shukla, U. C. 7138, 9087
Shul'gin, I. A. 6487
Shull, A. V. 6332
Shull, V. E. 4221
Shulman, Y. 6479
Shultz, P. G. 6950
Shumaker, J. R. 5919
Shumik, S. A. 5138
Shumway, L. K. 2855
Shur, I. I. 8005
Shuruba, G. A. 6600
Shurygina, T. D. 2901
Shutak, V. G. 6524, 8419
Shvebs, A. G. 5340
Shvedskaya, Z. M. 8632
Siba, S. 2430
Siddappaji, C. 5489, 6251, 6252
Siddique, M. A. 1277, 5330
Siddiqui, M. S. 3031
Siddiqui, S. A. 5530
Sidel'nikova, L. I. 3741
Sidhu, A. S. 1275, 1489, 3585, 8232, 8233
Sidorenko, V. A. 949, 3430
Sidorov, V. I. 1948
Sieber, J. 4611, 5472, 6161, 6979
Siechowski, J. 8114
Siegel, M. R. 655
Siegel, S. M. 157
Sij, J. W. 8658
Sijpesteijn, A. K. 5355
Sikharulidze, A. M. 8117
Silber, H. 2277
Silberschmidt, K. M. 3634
Silberstein, Y. 2239
Silina, Z. M. 2255
Silinis, H. 2346
Sill, W. H., Jr. 2447
Sillix, D. 7881
Silva, A. J. da 9195
Silva, C. G. 5644, 9183
Silva, C. J. da 9170
Silva, F. 6294
Silva, F. P. W. 9183
Silva, J. V. da 8985
Silva, M. 8960
Silva, M. C. C. 9172
Silva, P. 5612
Silva, R. L. de 9270
Silva, R. L. de 7265
Silva, U. L. de 6468, 6469
Silveira, A. C. 5580
Silveira, S. G. P. da 4532
Sim, E. S. 4735
Sim, K. Y. 3294
Simakina, S. V. 76, 1014, 3467
Šimánek, V. 5517
Simão, S. 8123
Simbwa-Bunnya, M. N. 4474, 8220
Simchon, S. 2239, 4655, 8892
Simeonova, I. 8594
Simidchiev, Kh. 3796
Simidchiev, T. 8334
Siminovitch, D. 8768
Simlot, M. M. 231
Simmonds, N. W. 9222
Simmonds, S. P. 4711
Simmons, A. F. 435
Simola, L. K. 5413
Simon, E. W. 163, 4499
Simon, I. 7543
Simon, J.-L. 584, 2710
Simon, L. 9056
Simonnet, M. 6030
Simonova, T. T. 528
Simons, D. H. 1363, 7010
Simons, R. K. 4914, 4959, 5727, 5729
Simovski, K. 3489, 6666, 7445
Simpson, G. M. 3743
Simpson, K. L. 5365
Simpson, R. E. 3315
Sims, W. L. 2134
Sinclair, J. B. 5102, 6086
Sinclair, W. A. 6728
Sinden, J. W. 7830
Singh, A. 3144, 3292, 7065, 8979
Singh, A. B. 1609, 3246, 6414
Singh, A. R. 3218
Singh, B. 1298
Singh, B. 2012, 2070, 4485, 5995, 7616
Singh, B. P. 271, 401, 1459, 1629, 7118, 8881, 8982
Singh, C. B. 352, 5827
Singh, C. P. 9006
Singh, D. 400
Singh, D. P. 337
Singh, D. V. 842, 6050
Singh, G. 416, 1275, 3585, 7765, 8211, 8232
Singh, G. P. 4098, 8194, 9250
Singh, H. 677, 2473
Singh, I. 7758
Singh, I. S. 8091
Singh, J. 3690, 6045
Singh, J. N. 337
Singh, J. P. 380, 1639, 3656, 5434, 5977, 6808
Singh, J. R. 8161, 9173
Singh, J. S. 1259
Singh, K. 165, 2740, 8230, 8663
Singh, K. K. 3212, 5573
Singh, L. B. 3238
Singh, M. M. 5643
Singh, M. P. 849
Singh, N. D. 2460
Singh, N. T. 4447
Singh, O. 416, 1629
Singh, O. S. 633, 1152, 4354, 4721, 5207
Singh, P. 3291, 5665, 9280, 9281
Singh, P. P. 8211
Singh, R. 569, 796, 2713, 3234, 3291, 4641, 5665, 6808, 8772, 9280, 9281
Singh, R. D. 840, 1590, 3214, 3937
Singh, R. K. 206, 3227
Singh, R. K. N. 4819
Singh, R. N. 2525, 2707, 3210, 3234, 3237, 3241
Singh, R.-N. 6718
Singh, R. N. 9178
Singh, R. P. 7237, 7757
Singh, R. R. 8194
Singh, R. S. 3209, 4721, 9006
Singh, S. 3086, 3228, 6427, 6438, 7754, 8786, 9134, 9233
Singh, S. N. 7550
Singh, T. K. S. 6894
Singh, U. R. 5630
Singh, U. S. 9242
Singh, V. P. 8987
Singh, Y. P. 653
Single, W. V. 442
Sinha, A. C. 9224
Sinha, G. C. 3230, 3231
Sinha, M. K. 569, 4470, 5562, 6754, 7143, 8059, 8559
Sink, K. C., Jr. 1390
Sinn, H. 7502
Sinnadurai, S. 602, 3770
Sínška, I. 3380
Sinyukhin, A. M. 3687
Siok Hui Sy 5902
Sircar, S. M. 1671, 3011
Siregar, M. 8180
Siregar, O. 8179, 9209
Sirohi, P. S. 5948
Sirry, A. R. 4489
Sirsi, M. 808
Sistrunk, L. A. 6813
Sistrunk, W. A. 1207, 1221, 4391
Sithanatham, S. 6443, 9227, 9253
Sithanathan, S. 9227
Sitterly, W. R. 3316
Situmorang, S. 4840
Sivakumar, C. V. 381
Sivakumaran, S. 758
Sivapalan, P. 2484
Sivasubramaniam, S. 6458
Sivori, E. M. 4647
Sivtsev, M. V. 6269, 6926, 8778
Skene, D. S. 8318
Skene, K. G. M. 1121, 1928, 5140
Skiba, N. S. 7393
Skidmore, E. L. 11
Skieba, K. 6156
Skinner, G. 8625
Skipp, R. A. 3706
Skirde, W. 3890, 5441, 7920, 7927, 8915
Skirvin, R. M. 5870
Skoblin, A. P. 2116, 5376, 7747
Skobolina, L. P. 2116, 5376, 7747
Skočič, M. 4597
Skoo, G. F. 219
Škorpik, M. 6801
Skrentny, R. F. 2033
Skroch, W. A. 625, 6068
Skrubis, B. G. 4738
Skrypnik, V. V. 5121
Slack, C. I. 7833
Slack, D. A. 8563
Slack, G. 886
Sladký, Z. 2663
Slate, G. L. 5427, 5428
Slattery, R. O. 4, 2508
Slavcheva, R. 2533
Sleesman, J. P. 4383
Slepyan, L. I. 8034
Šlesinger, Z. 2717
Śliwowski, J. 4637
Sloane, G. E. 2478
Slob, A. 8908
Slogteren, D. H. M. van 290
Slogteren, D. H. M. van 2958, 6180, 7007
Slomnicki, I. 3540, 3546
Slović, D. 2522, 3385, 3386, 6545
Słowik, K. 946
Sly, J. M. A. 3958
Smagula, J. M. 2691
Smal, J. P. 4152
Small, R. H. 4787
Smart, R. E. 8565
Smeal, P. L. 2312
Smillie, G. W. 6908, 6909
Smirnov, A. G. 1048
Smirnov, A. M. 193, 9052
Smirnov, A. O. 2322
Smirnova, N. G. 3001
Smit, E. H. D. 388
Smith, B. D. 4222
Smith, B. N. 3739
Smith, C. A. 43
Smith, C. N. 7282
Smith, C. R. 2685
Smith, C. R., Jr. 4761
Smith, D. A. 8688
Smith F., H. 4848
Smith, H. 5687, 7733
Smith, H. A., Jr. 7752
Smith, I. K. 3717, 4479
Smith, J. D. 1371, 5428, 7929
Smith, J. F. 8823
Smith, J. G. 8703
Smith, J. R. P. van H. 3906
Smith, J. W. 4394
Smith, J. W. M. 3642
Smith, L. P. 10
Smith, M. S. 2031
Smith, M. W. 1844
Smith, M. W. G. 34, 3353
Smith, N. J. 624
Smith, O. E. 1154
Smith, O. S. 8643
Smith, P. F. 3117, 8073
Smith, P. R. 6632
Smith, R. 5183
Smith, R. A. 9076
Smith, R. B. 1801
Smith, R. F. 2501, 7282
Smith, S. 9246
Smith, S. H. 512, 1822, 1823, 1824, 1825
Smith, W. 3908
Smith, W. L., Jr. 1832, 6619
Smock, R. M. 964, 1772
Smolenski, S. J. 2346
Smolensky, D. C. 8108
Smoliński, M. 8400
Smol'yaninova, L. A. 281
Snee, R. D. 690
Sneh, B. 110
Snezhko, V. L. 8488
Snizhko, V. L. 1302
Snoad, B. 2048
Šnobl, J. 5506
Snoek, N. J. 7643
Snyder, G. H. 7946
Snyder, M. J. 3636
Snyder, W. C. 2057, 3866
Snyder, W. E. 6215
So, V. 3163
Šobek, J. 3454
Sobers, E. K. 2287, 6240, 7943
Sobesky, O. 7823
Soboleva, L. E. 5426
Sobolevskaya, K. A. 8988
Sobornikova, I. G. 1912
Soczek, Z. 7362, 7501, 8398
Sodja, A. 4784
Soeda, Y. 4477
Soedarsono 8133
Soeffky, A. 7594
Soenarjo 8133
Soenen, A. 951
Soepadmo, B. 4078, 8273, 8274
Sofowora, E. A. 774, 9023
Sogoyan, P. Ya. 581
Sohi, A. S. 8760
Sohi, H. S. 4063, 7546
Sohoo, M. S. 204
Sokolova, V. A. 5088
Sokolov'ska, T. Ī. 6721
Solangi, G. R. 1610
Soleimani, A. 583
Solel, Z. 3130
Solomon, J. J. 2807
Solomonovskii, L. Ya. 6100
Solomos, T. 656
Solovei, E. P. 6709
Solov'ev, I. S. 40, 8377
Soltanpour, P. N. 4413
Sölva, J. 464, 5052, 6568, 7562
Somma, V. 815, 4802, 4803
Sommer, H. E. 6929
Somas, A. 6799
Somoss, A. 5881
Son, J. S. 475
Sonawane B. R. 857
Sondheimer, E. 2803, 2804
Song, K. W. 544, 1180, 1308
Song, S. F. 8829
Sonnenberg, P. E. 1963
Sonneveld, C. 8606
Sonoda, R. M. 4574
Sood, A. R. 353
Sood, P. P. 2213
Sood, V. K. 9018
Soon, P. 4076
Soost, R. K. 6329, 7123
Sopalova, E. V. 3498, 4283
Sorge, P. 1875
Soria V., J. 1666, 7178
Soriano, J. M. 7748
Sorogera, T. 1228
Sorour, A. 6470
Soşeliya, M. F. 4903
Šoškic, A. 2594, 2656

- Šoškić, M. 2619, 3451
 Sosnová, V. 241
 Sotirov, A. 504, 2655
 Sotirova, V. 257
 Soto Salazar, C. A. 1576
 Sottile, I. 1520, 6376
 Soule, J. 1505, 1594, 1659, 8054
 Soulen, D. M. 512, 1823, 1824, 1825
 Sourlekov, P. 3620
 Sousa, L. da C. e 3563
 South Africa, South African Sugar Association Experiment Station 7230
 South African Sugar Journal 7229
 Southwick, F. W. 976
 Southwood, T. R. E. 2501
 Souty, J. 2524
 Spaar, D. 1836, 5164, 5410, 7298, 7299, 8436
 Spaargaren, M. D. 2226
 Spadafora, R. R. 1292, 3809, 4712, 5253
 Spalding, D. H. 1287, 4873
 Špaldon, E. 236, 1262
 Špaldon, E. 1263
 Špaldon, E. 2096
 Spangelo, L. P. S., 4174
 Sparapano, L. 4796
 Sparks, D. 1038, 5795
 Sparnaaij, L. D. 7896, 7897
 Sparrow, A. H. 5418
 Spasov, S. P. 3796
 Spasov, Ts. 7467
 Spears, G. F. S. 618
 Spears, G. F. S. 617
 Speckmann, G. J. 1370
 Spek, J. van der 3325, 6785
 Spelbaum, A. 3335
 Spencer-Jones, D. H. 6542
 Spencer, M. 656
 Spencer, P. W. 50, 7400
 Spensley, P. C. 355
 Sperling, D. 3597
 Spiegel-Roy, P. 4166, 4341, 5058, 5708, 6333, 7124
 Spielmann, H. 2435
 Spiker, S. 3745
 Spirovska, R. 3489
 Splittstoesser, W. E. 2571, 7398, 7693
 Spomer, L. A. 6147
 Spongberg, S. A. 6131
 Sprague, G. F. 4
 Sprent, J. I. 2040
 Spring, M. S. 2208, 2209
 Spronk, A. M. 3675
 Spruit, C. J. P. 4505
 Spruit, G. 8360
 Spurdon, C. 4634
 Spurling, A. T. 7164, 8673
 Spurling, D. 7164
 Spurr, A. R. 2641, 3820
 Squire, F. A. 5654, 5671
 Squire, J. 5470
 Sreenivasan, A. 3210
 Sri Lanka, Coconut Research Institute 7185
 Sri Lanka, Director of Agriculture 2733, 3171, 6323
 Sri Lanka, Tea Research Institute 8262
 Sridhar, T. S. 4063, 7546
 Srikantiah, B. V. 6397
 Srimathi, R. A. 3038, 7086
 Srinivasa, M. V. 6397, 6399
 Srinivasachar, D. 8613
 Srinivasan, C. 3578, 4045
 Srinivasan, C. S. 3207, 8146
 Srinivasan, K. 5992
 Srinivasan, T. R. 4090
 Sripathi Rao, B. 8183
 Sriraman, M. C. 9039
 Srivastava, A. K. 4818
 Srivastava, A. S. 330, 653
 Srivastava, D. C. 143, 1011
 Srivastava, D. N. 3242
 Srivastava, G. N. 8992
 Srivastava, K. C. 5555
 Srivastava, L. S. 2980
 Srivastava, S. N. 7065
 Srivastava, U. S. 8981
 Srp, A. 5509
 Sruoginite, A. V. 5897
 Staavereen, M. C. van 7875
 Staby, G. 2251, 2252, 3869
 Staby, G. L. 295, 6177
 Stacey, B. E. 7056
 Stadelmann, E. 3737
 Stadelmann, E. J. 5313
 Staden, J. van 750, 6243
 Staden, O. L. 1798
 Stadler, J. D. 5782, 7456
 Stafford, E. M. 5862
 Stafford, J. R. 978
 Stafford, L. E. 1650
 Stafford, L. M. 795
 Stahl, W. H. 8984
 Stähli, H. R. 7519
 Stählin, A. 3895
 Stahly, E. A. 961, 5000, 8373
 Stahmann, M. A. 8718
 Staikov, V. 7986
 Stainer, R. 1806
 Stajčić, N. 2594
 Stalder, L. 909, 1712, 2562
 Stall, R. E. 2848, 5916
 Štambera, J. 2887, 4442
 Štampar, K. 2661
 Stančević, A. S. 2620, 2628, 3487, 3490, 3537
 Stanchev, L. B. 683, 684
 Stanchina, G. de 5740
 Standardi, A. 1521, 7455
 Staněk, J. 4188
 Stănescu, D. 8538
 Staneb, B. 2799
 Stanev, D. 5499
 Stang, E. J. 549
 Stanhill, G. 1472
 Stanislas, E. 8027
 Stankevich, N. B. 7914
 Stanko, S. A. 7113
 Stankov, A. I. 5855
 Stanković, D. 2520
 Stano, J. 3078
 Stanojević, S. 8541
 Stanová, M. 5757
 Stansell, J. R. 8309
 Starbuck, J. S. 2015
 Starch, J. R. 6984
 Starikov, A. G. 6941, 7820
 Stark, C. 8914
 Stark, R. 3532, 5811, 8498
 Staron, T. 762
 Starozhilova, O. N. 8343
 Starý, F. 2356
 Statens Forsøgsvirksomhed i Plantekultur 4699
 Statsenko, A. P. 6679
 Statskevich, I. M. 4970
 Staub, A. 8517
 Staub, T. 1985, 2760
 Staudt, G. 1930, 6762, 8555
 Steadman, J. R. 644
 Stearn, W. T. 7279
 Stebbins, R. L. 1775, 4221
 Steblyuk, N. I. 5277
 Steekelenburg, N. A. M. van 3929
 Steen, J. A. Van der 2211
 Steen, J. v. d. 7878
 Steen, J. van der 7878
 Steen, T. N. 3936
 Steenkamp, J. C. 2574
 Steer, B. T. 6044, 6357, 8754
 Stefan, N. 7482
 Stefanizzi, L. 6190
 Steib, R. J. 6442, 8224, 9252
 Steib, T. 6473
 Stein, A. 1391, 6137
 Steinbach, P. 5352, 6088
 Steinberg, B. 5114
 Steindl, D. R. L. 8226
 Steiner, A. A. 1677
 Steiner, G. W. 424, 4097
 Steiner, K. G. 1579, 2450
 Steiner, R. 1851
 Steinitz, B. 8697
 Stellmach, G. 5853
 Stellwaag-Kittler, F. 1914
 Stemberge, G. E. 1782, 1830, 5774, 5775, 5777
 Stene, J. 4135
 Stenina, N. V. 2084
 Stenmark, A. 6089
 Stenseth, C. 2503, 5818, 7802
 Stepanov, P. A. 4179
 Stepanova, A. M. 5318
 Stepanova, E. M. 2989
 Stepanova, F. P. 7417
 Stephenson, G. R. 3660
 Steponkus, P. L. 2927, 2997
 Stepp, B. R. 6812
 Sterling, C. 289
 Stern, A. I. 7710
 Sterrett, J. P. 4481
 Stessels, L. 2453
 Stetsenko, I. I. 6727
 Stettiner, M. 3763
 Steubing, L. 6015
 Steveninck, M. E. Van 5171
 Steveninck, R. F. M. Van 1956, 5171
 Stevens, C. P. 3676
 Stevens, K. L. 6369
 Stevens, M. A. 2892
 Stevens, W. A. 4634
 Stevenson, D. W. 7939
 Stevenson, D. W. A. 414
 Stevenson, J. 1502
 Stevenson, J. H. 4490
 Stevenson, N. D. 5648, 8192
 Stevenson, W. R. 7729
 Steward, F. C. 6110, 6111, 6112, 6479
 Stewart, C. R. 3722, 5261, 5996
 Stewart, F. B. 8770
 Stewart, I. 2410, 4814
 Stewart, J. K. 1157, 2756, 5915, 6790
 Stewart, P. S. 5380
 Stewart, R. B. 5456
 Stewart, R. N. 1344, 1385, 7441, 8877
 Steyn, P. L. 8162
 Stice, N. W. 2275
 Stichting Proefstation voor de Champignoncultuur 6120
 Stickland, R. G. 273
 Stickler, P. 882, 1685, 6496, 8849
 Stienstra, W. C. 8962
 Stigter, H. C. M. De 155
 Stiles, J. I. 3849
 Stiles, W. C. 4989
 Still, G. W. 5127
 Stimamiglio, L. 4358
 Stino, G. R. 1829
 Stipes, R. J. 4209
 Stocker, W. 4322
 Stocky, G. 531
 Stoessl, A. 1268, 5324, 7763
 Stoev, K. 1896, 1909, 2718, 6717, 6767, 8537
 Stoev, K. D. 582
 Stoeffert, G. 1317, 2175, 4704, 8904
 Stöhr, D. 2160
 Stohr, J. 4996
 Stohs, S. J. 776, 1435, 2342
 Stoian, E. 7556
 Stoilov, A. 6546, 8421
 Stoilov, G. 4200, 6556, 6557
 Stoitsev, A. 2856
 Stojkovska, A. 6629, 7447
 Stoker, J. R. 2208, 2209
 Stoker, R. 8715
 Stoll, K. 981, 4226, 5753, 6590, 8408
 Stoltz, L. 2008
 Stoltz, L. P. 2783, 6828
 Stolyarova, L. A. 8081
 Stolz, L. H. 2383, 2393, 3987
 Stompfová, H. 7081
 Stone, B. C. 3985
 Stone, E. G. 1422
 Stone, O. M. 7012
 Stoner, A. K. 5335, 7771
 Stonov, L. D. 7532
 Storey, I. F. 7826
 Storey, J. B. 1844
 Storozhenko, E. M. 5701, 6517
 Stort, M. N. S. 1381, 2977, 8934
 Störtzer, M. 936, 937, 938, 1736
 Störtzer, T. 936, 937, 938, 1736
 Stösser, R. 68, 69, 1002, 1004, 8445
 Stothers, J. B. 7763
 Stouffer, R. F. 512, 1822, 1823, 1824, 1825
 Stout, B. A. 55
 Stover, R. H. 5604, 7175
 Stowe, B. B. 6255
 Stoy, V. 4
 Stoyanov, S. 5745, 6674, 7536, 7538
 Stoyanov, S. M. 6539
 Strada, G. della 3547
 Strakhova, Z. S. 2564
 Strandzhev, A. 6606
 Stratmann, S. 2303, 2984, 6160
 Strauss, D. 2436
 Strauss, E. 489, 4266, 4295
 Streibl, M. 4714
 Streiff, R. R. 4816
 Streiberg, H. 8397
 Strelakova, A. I. 5369
 Strehkova, V. I. 7061
 Strelets, V. D. 1807
 Strel'nikova, V. N. 2683
 Stretch, A. W. 5090
 Strickland, A. H. 1692, 2501
 Strijdom, B. W. 4469
 Strobel, G. A. 424, 8231
 Strobel, J. W. 6914
 Stroganov, B. P. 2815, 3734, 6927
 Strube, U. 4500
 Struckmeyer, B. E. 5416
 Struppek, G. 2285, 5469
 Strydom, D. K. 4973
 Stuart, N. W. 1359, 5428
 Studentsov, O. V. 4420
 Stuijver, B. 2963
 Stukel, K. L. 7914
 Stull, J. W. 372
 Stumpf, P. K. 4784
 Sturm, M. 6782
 Sturua, Z. Sh. 5875
 Stushnoff, C. 2587, 7353
 Su, N. H. 2151
 Suárez, E. 308
 Subbarao, P. 6256
 Subbiah, R. 697, 6810
 Subbiah, S. 5497
 Subbotovich, A. S. 1093
 Subirats, F. J. 4686
 Subramaniam, A. 853
 Subramaniam, T. R. 447, 838
 Subramanian, S. S. 2341, 3035, 4771, 6239, 6304, 9285
 Subramanian, T. M. 3150, 9106
 Subramanian, T. R. 1572
 Subramanyam, H. 3210, 4872, 7205
 Subramanyam Raju, D. 3225
 Subramanyam, S. 8596
 Suchý, V. 3078
 Sudakov, V. L. 5285
 Sudo, S. 4528, 4533, 5328
 Sues, J. 3337
 Sufi, S. M. 6479
 Sugahara, Y. 2111
 Suh, C. S. 1443
 Suhonen, I. 5215, 6019, 8615
 Sukartaatmadja, K. 8179, 9209
 Sukhareva, T. T. 5293
 Sulebele, G. A. 8745
 Suleimanova, S. S. 7677
 Suleimenova, L. 5536
 Sulikeri, G. S. 2715, 6003
 Sullivan, C. Y. 4
 Sullivan, D. T. 5718
 Sullivan, F. 1340
 Sullivan, G. H. 3795
 Sulochana, C. B. 2807
 Sulochana, N. 6239
 Sulser, H. 6369
 Sultana, F. 5480
 Sulzbach, C. W. 6932

- Sumbak, J. H. 9149
 Sumenkova, T. N. 8446
 Sumida, S. 6758
 Summer, D. R. 146, 2771
 Summers, L. A. 2041, 2042
 Summers, L. L. 6334, 8099
 Summons, R. E. 3017
 Sumner, M. E. 410
 Sun, S. M. 4484
 Sunarjono, H. 5188, 6034
 Sund, K. A. 8246
 Sundaram, S. 7179
 Sundararaj, D. D. 300
 Sundararaj, J. S. 3210, 3240, 4044, 4871
 Sundararajan, S. 697, 6810
 Sunde, R. 7631
 Suomi, K. 101
 Suprunov, N. I. 3961
 Süptitz, W. 8945
 Surányi, D. 4164, 8329
 Surendranathan, K. K. 6390
 Surlekov, P. 237, 3620, 3621
 Surre, C. 2456
 Suruzhin, V. T. 5105
 Suruzhin, V. T. 1113
 Surya Kantha Raju, K. 4857, 8147, 9161
 Susnoski, M. 3325
 Süß, W. 5521
 Sussex, I. M. 4692
 Sutandjono, S. 4762
 Sutcliffe, J. F. 215, 3299
 Suteu, F. 325
 Sutherland, O. R. W. 3410
 Suthers, G. 3989
 Šutić, D. 3506
 Sutidjo, K. 4106
 Sutra, G. 2906
 Sutton, B. G. 4674
 Sutton, D. L. 123
 Sutton, P. 3785
 Sutton, T. B. 7450
 Suzuki, E. 1998
 Suzuki, H. 2592
 Suzuki, I. 2111
 Suzuki, T. 6826, 8071, 8637, 9279
 Suzuki, y. 2818
 Sváb, J. 6261
 Švachulová, J. 5266
 Swampa, G. 4454, 6820
 Swajda, F. J. 318, 4706, 4707
 Svendsen, A. B. 3024
 Šveshnikova, I. N. 2780
 Svetov, V. G. 578, 5129, 7574
 Svoboda, G. H. 2347
 Svoboda, J. 5272, 5273
 Swaify, S. A. El 6439
 Swaify, S. A. El 4888
 Swamy, G. S. 839, 3210, 3225
 Swanson, C. A. 8658
 Swanson, S. T. 7049
 Swardt, G. H. De 256
 Swart, J. 3769
 Swarts, H. D. 8163
 Swartz, H. D. 8171
 Swarup, V. 5977, 6173
 Sweden, Lantbrukshögskolan, Avdelningen för Växtnäring av Frukt och Bär, Balsgård 5075
 Sweden, Lantbrukshögskolan, Avdelningen för Växtnäring av Frukt och Bär, Balsgård 6508
 Sweep, A. A. M. 1139, 1265, 1979, 3781
 Sweet, R. D. 3797
 Swenson, K. G. 5428
 Swift, J. G. 8573
 Swinburne, T. R. 5755
 Swingle, H. D. 641
 Swirski, E. 7459
 Switzer, G. M. 2263
 Switzerland, Arbeitsgemeinschaft für Sortenprüfungen bei Zierpflanzen aus Samen 7002
 Switzerland, International Potash Institute 864
 Sy, S. H. 5902
 Sychev, V. G. 3458
 Sycheva, Z. F. 654
 Sydnor, T. D. 6176
 Syed, M. M. 4888, 6439
 Sykes, J. T. 1854, 6665
 Synge, R. L. M. 6783
 Syogaki, Y. 2625, 2742
 Syono, K. 5529
 Syrdal, D. D. 7965
 Sys, S. 4232
 Systema, W. 2913
 Sytnik, K. M. 2071, 3746
 Sytsema, W. 2182, 2194, 7861, 7866, 7906
 Szabó, I. 6107, 7672
 Szabó, L. G. 6838
 Szakál, M. 6042
 Szász, K. 6064
 Szczepański, K. 8369, 8370, 8371
 Sze, W. B. 6435
 Szegedi, S. 5141
 Székely, I. 8516
 Szendrei, K. 4775, 9038, 9056
 Szilágyi, K. 8509
 Szilasi, M. 6284
 Szilasne, M. K. 4061
 Szith, R. 8355, 8356
 Szkolnik, M. 92, 986
 Szejnberg, A. 7615
 T., J. 3519, 6672, 6696
 T., J. M. 1658
 Tabardel, J. P. 8454
 Tabata, M. 9035
 Taborsky, V. 8701
 Tadmor, U. 1490
 Taffin, G. de 4852
 Taira, S. 3057
 Takahashi, D. T. 7255
 Takahashi, E. 3168, 4114, 4906
 Takahashi, J. 1616
 Takahashi, N. 4517
 Takahashi, S. 2577
 Takahashi, T. 6698
 Takakuwa, M. 8650
 Takama, F. 2744
 Takanashi, K. 6642
 Takatzu, A. 5563
 Takehana, H. 5366
 Takematsu, T. 2117
 Takemoto, T. 7999
 Takenaga, T. 4933
 Takeo, T. 4108, 4115, 4904, 5664
 Takeshita M. 4682
 Takeuchi, Y. 2117
 Takidze, R. M. 7133, 9083
 Talapatra, B. 4767
 Talapatra, S. K. 4767
 Talbert, R. E. 623, 8588
 Tale, Y. M. 619
 Talekar, N. S. 6863
 Talekar, R. R. 2373
 Talhouk, A. S. 459
 Talibdeen, O. 6458
 Talipova, M. A. 9016
 Tăloi, N. 7567
 Tam, L. Q. 176, 177
 Tam Tai Kin 6410
 Tamada, T. 8650, 9088
 Tamaki, K. 6000
 Tamarova, A. F. 1862
 Tamás, J. 6284
 Tamberg, T. G. 2157, 2255, 4654
 Tamponi, T. 3566
 Tamrazyan, E. 6164
 Tamura, S. 2117, 6016
 Tan, A. M. 4985
 Tan, K. M. 8172, 9197
 Tanaka, H. 2389, 2398, 3124, 4799
 Tanaka, J. S. 5331
 Tanaka, M. 2098
 Tanaka, O. 3068
 Tanaka, S. 4116
 Tanas'ev, V. K. 928
 Taneja, S. 277
 Tanev, Z. 688, 6077
 Tango, C.-S. 7217, 8170
 Tango, J. S. 359
 Taniguchi, T. 7153
 Tanner, C. B. 1250
 Tanno, S. 2592
 Tantera, D. M. 9252
 Tanton, T. W. 1223, 1224
 Taper, C. D. 972, 5010, 5712
 Tapia M., F. 5794
 Tapio, E. 1072, 1073, 4308, 4643
 Tappan, W. C. 7223
 Tarakanova, G. A. 6857
 Tarasashvili, K. M. 7717
 Tarasenko, M. P. 8352
 Tarasov, V. M. 1742
 Tarjan, A. C. 3133
 Tarjot, M. 1552, 8136
 Tartaglia, F. P. 2943
 Tartier, L. 7751
 Tarusov, B. N. 6727
 Tarutani, T. 6361
 Tarverdyan, V. I. 3734
 Taşca, G. 7307, 7426
 Tashiro, H. 7930
 Tatachari, Y. 839
 Tatarishvili, A. N. 4788
 Tate, K. G. 473
 Tate, L. A. 7475
 Tatebe, T. 7671
 Tateishi, S. 1835
 Tatham, P. B. 4409
 Tattire, N. H. 8591
 Taubel, N. 8894
 Tauber, M. J. 3850
 Tavadze, M. E. 7129
 Tavdumadze, E. I. 3131, 8265
 Tavrin, A. E. 6014
 Tawic, H. A. 4489
 Tay, T. H. 9199
 Tayama, H. K. 2251, 2252, 3869
 Taylor, B. K. 1018, 6479
 Taylor, C. E. 2502
 Taylor, G. S. 8719
 Taylor, H. F. 3719
 Taylor, H. J. 6650
 Taylor, J. 1821
 Taylor, J. D. 178, 651, 721, 8686
 Taylor, K. D. 1642, 7170
 Taylor, R. H. 575, 5853
 Taylor, R. M. 2654
 Taylor, S. E. 382
 Taylor, W. C. 335
 Tchibozo, H. M. 4852, 9155
 Tchindé, J. 5599
 Teatota, S. S. 840, 1590, 3214, 3224, 5626
 Tee, J. L. 6463
 Teh-ling Chu 8255
 Tehrani, G. 3511
 Teich, A. H. 7124
 Teisseire, P. 8990
 Teisson, C. 6419, 8175
 Teles, F. F. F. 372
 Tellarini, C. 4153
 Temkin-Gorodeiskii, N. 3771
 Templar, J. C. 3277
 Tenieshvili, P. P. 9275
 Teodorescu, S. C. 7549
 Teppaz-Misson, C. 2749
 Terakado, K. 2914
 Terán, S. R. 6340
 Teranishi, J. 2056
 Teraoka, Y. 7140
 Terblanche, J. H. 4973
 Terek, O. I. 154
 Terekhov, I. I. 6724
 Terhune, S. J. 1413, 3947, 7965
 Terlidou, M. H. 6745
 Terpstra, W. 4396
 Terranova, W. A. 280
 Terriere, L. C. 8997
 Teshima, A. H. 4081, 8245
 Tesi, R. 4624
 Tešić, M. 6550, 6641, 6681
 Teskey, B. J. E. 1783
 Tešović, Ž. V. 4177
 Teufel, E. 6009
 Teuscher, E. 8001
 Tewari, H. B. 2213
 Tewari, J. D. 1426
 Tewari, M. N. 2808
 Tewari, R. N. 5977
 Teyssandier, E. E. 1212
 Tezuka, Y. 5687
 Thaine, R. 2510
 Thakar, K. A. 7115
 Thakur, D. P. 9118
 Thakur, D. R. 8330, 9079
 Thakur, M. R. 8666
 Thakur, P. C. 235
 Thakur, S. S. 8330
 Thamburaj, S. 697, 6810, 7756
 Thampan, P. K. 9150
 Than, A. 2898
 Thapar, R. K. 930
 Tharanathan, R. N. 3034
 Theiler, R. 5904
 Theiner, M. 2360
 Theis, W. 579
 Thicoipé, J. P. 6698
 Thiele, G. F. 1046
 Thieme, H. 329, 7079
 Thirumalachar, M. J. 9090
 Thom, M. 2476
 Thomas 1153
 Thomas, B. 4389
 Thomas, E. 8811
 Thomas, G. G. 3955, 3959, 5510
 Thomas, H. E. 1886
 Thomas, O. B., III 8294
 Thomas, P. E. 2871
 Thomas, S. M. 5964
 Thomas, T. H. 150, 1249, 3667, 3772, 7611
 Thomas, W. 1528, 4453, 8651
 Thompson, A. C. 2306
 Thompson, A. E. 2106
 Thompson, A. H. 2644
 Thompson, A. K. 664
 Thompson, D. J. 4372
 Thompson, G. D. 427, 9263
 Thompson, J. A. 442
 Thompson, J. M. 4208
 Thompson, L. S. 1881
 Thompson, M. M. 1853, 8477
 Thompson, W. F. 6012
 Thompson, W. R. 5415
 Thomsen, A. 2916
 Thomsen, A. 3525
 Thomson, G. M. 4086, 7242
 Thomson, W. W. 4515
 Thorne, S. N. 695
 Thorne, S. W. 185
 Thornley, J. H. M. 5675, 5676, 6187
 Thornton, M. D. 4751
 Thottappilly, G. 5276, 8717
 Thy, B. D. 2872
 Ticho, E. 4039
 Ticho, R. J. 1536
 Tiessen, H. 4559, 6081
 Tietema, T. 2964, 2965
 Tiichelaar, E. C. 8764
 Tiitchen, K. 1193
 Tikanadze, L. N. 4801, 8060
 Tikhonova, B. B. 4513
 Tikhvinskii, I. 8533
 Tilge, L. 3863
 Tillyaev, K. S. 9016
 Tilney-Bassett, R. A. E. 3843, 6980
 Timberlake, C. F. 58
 Timmer, M. J. G. 2256, 5435, 8902, 8903
 Timms, R. E. 3090
 Timofeeva, T. A. 5190
 Timon, B. 8460
 Timoshenko, M. A. 2315
 Timoshenko, S. E. 960
 Tin-Wa, M. 2343, 5532, 6331
 Ting, I. P. 7711, 8682
 Tinga, J. H. 8943
 Tingey, D. T. 5178
 Tirdea, C. 2
 Tirimanna, A. S. L. 3779, 4544
 Tirtawidjaja, S. 3126
 Tissut, M. 2834
 Tite, D. J. 1254
 Titova, V. 4294
 Titus, J. S. 50, 2571, 7398, 7400
 Tiwari, C. B. 1639
 Tiwari, K. C. 9046

- Tiwari, K. N. 849
 Tiwari, R. D. 3071
 Tjan, G. H. 6501
 Tjia, B. 6978, 8864
 Tjptosuhardjo, S. 4874
 Tkachenko, G. V. 1929
 Tkachenko, V. I. 2334
 Tkemaladze, G. Sh. 4903
 Tkhakakhov, A. K. 4458
 To, S. H. 1444
 Toaima, N. M. 2167, 2168
 Toba, H. H. 4443
 Tobiašek, P. 2908
 Tochihara, H. 1999
 Tocino, E. M. 7171
 Todaka, S. 2111
 Todd, A. W. 4841
 Todd, G. W. 5254
 Todorov, I. 6767
 Todorov, I. 6876, 6877, 8738
 Todorov, Kh. 5118
 Todorov, V. 2566, 4200, 6556, 6557
 Todua, N. A. 2495
 Tognoni, F. 717, 3910
 Toit, J. J. du 7622
 Toit, J. L. Du 7259
 Toky, K. L. 7884
 Tolbert, N. E. 1959
 Toler, R. W. 2970, 2972, 6197
 Tölgyesi, G. 6059
 Tolle, W. E. 1705
 Tolstoguzova, V. G. 4185, 8337
 Tolstrup, E. 8940
 Toma, L. 5338, 5900
 Tomalin, A. W. 1077, 5089
 Tomar, D. S. 9164
 Tomaško, I. 2908
 Tombesi, A. 564, 1521, 1818, 2422, 2426
 Tomcsányi, P. 1679
 Tome, F. 657
 Tomerlin, A. T. 4002
 Tomes, M. L. 8764
 Tomi, A. L. El 2438
 Tomimatsu, T. 5570
 Tominaga, N. 2430
 Tomita, E. 8070
 Tomizawa, C. 5928
 Tomko, J. 7954
 Tomlinson, J. A. 1969, 1984, 3940, 3941
 Tommerup, I. C. 7632
 Tompa, A. 6715
 Tompkins, C. M. 282, 3866
 Tompkins, D. R. 1207, 1221, 5932, 5993
 Tompsett, A. A. 2243, 7011
 Tonakanyan, G. A. 4446
 Tonchev, G. 2714, 6737, 6768
 Tonder, M. J. van 5060
 Tongdee, S. C. 1546
 Tonini, G. 604, 990, 1507, 3433
 Tonks, E. 5589
 Tonks, N. V. 2122
 Tonosaki, T. 7419
 Toohey, C. L. 1651, 9232
 Toor, H. S. 9174
 Topalov, V. 1406
 Topchiiska, M. 7378
 Topchiiska, S. 4311
 Topping, A. J. 1077, 3558
 Torev, A. 8831
 Tori, K. 5570
 Torikata, H. 2272, 6352, 6645, 7458
 Tormann, H. 7288
 Török, L. 7494, 7508
 Törökfalvy, E. 8565
 Torre, G. della 3805
 Torres M., R. 1461, 8052
 Torres, R. E. 3595
 Torrey, J. G. 6017
 Tosello, G. A. 8934
 Tosh, G. C. 1622, 8208, 9240
 Tosi, H. 5580
 Tosi, T. 5103
 Tošić, M. 2522
 Toskov, N. 688
 Tošnarová, V. 9044
 Tóth, A. 6514
 Tóth, D. 6720
 Tóth, G. 6955
 Tóth, L. 9034
 Totterdell, C. J. 4125
 Totubalina, G. V. 7416
 Toul, V. 6002, 6943
 Toul, V. 5881
 Tournier, J. C. 2416
 Tourte, J. 3327
 Toutain, G. 9109
 Touzza, G. 7561
 Towers, G. H. N. 8999
 Townsend, L. R. 7515
 Toxopeus, S. J. 7008
 Toyoda, I. 4393
 Trachev, D. 2566
 Trajkovski, V. 6675, 6676
 Tramier, R. 269
 Tran Thanh Van, M. 3638
 Trappe, J. M. 8373
 Trautmann, W. 3888
 Trave, R. 3064
 Traverse, R. J. 7773
 Travina, O. K. 4975
 Travis, R. L. 226
 Traxl, V. 3063
 Treccani, C. P. 2597, 2781
 Treffry, T. 6865
 Trefois, R. 4232
 Treharne, K. J. 3296
 Trejo-González, A. 7764
 Trelietskaya, E. V. 3105
 Trémolières, A. 6013
 Trenkle, K. 328
 Trenkle, R. W. 7987
 Trent, J. E. 6292
 Treskova, V. S. 7801
 Trespeuch, J. 5838
 Tressl, R. 2441
 Trevett, M. F. 7513, 7514, 7516, 8492, 8493, 8496
 Trevisan, L. M. 7273
 Tribulato, E. 803
 Trifonov, D. 5066, 6658
 Trinidad, University of the West Indies 9136
 Tripathi, G. M. 426
 Tripathi, R. L. 7250
 Tripathi, R. S. 3210, 8463
 Trique, B. 3788
 Trochoulis, T. 374, 9130
 Trocmé, O. 7182
 Trogoff, H. de 4811, 7155
 Trojánková, M. 2344
 Tromp, J. 1804, 2586, 3417, 6597, 7351
 Troncoso, A. 9110
 Troncoso, C. 9110
 Troncoso, J. 9110
 Troničková, E. 4444, 6801
 Troshko, E. V. 3062
 Troyan, A. V. 5667
 Trpevski, V. 7447
 Trüb, C. 2262
 Trubnikova, T. I. 5190
 Truc, M. C. 9065
 True, R. H. 8499
 Truel, P. 5828
 Truelove, B. 6831
 Truen, R. D. 7258
 Trujillo, G. E. 2021
 Trusevich, G. V. 5700
 Trushechkin, V. G. 1858, 7532, 8511
 Truter, S. J. 2961
 Trzcinski, T. 4978
 Tsai, A. H. 7867
 Tsai, S.-D. 5254
 Tsai, Y.-P. 2150
 Tsakadze, T. A. 5736
 Tsalbukov, P. 5502
 Tsanova, N. G. 8061
 Tsanev, T. 5035, 5036
 Tsangas, F. T. 1942
 Tsankova, E. T. 5496
 Tsao, S. J. 2787
 Tsatsaronis, G. C. 253
 Tsef, A. A. 6054
 Tseitlin, M. G. 8553
 Tsekhmistrenko, P. E. 5106
 Tsekleev, G. 4550, 5339
 Tsenov, E. I. 6927
 Tsereteli, G. L. 5736
 Tsintsadze, A. V. 3281
 Tsirkov, I. 688
 Tsivindo, A. Z. 2513
 Tsonev, D. 1269, 3701, 5936, 6039, 8753
 Tsugawa, C. 1757, 1780
 Tsukamoto, Y. 2217
 Tsumita, M. 2634
 Tsunoda, S. 8628
 Tsur, Y. 3983
 Tsurkamenko, N. G. 6723
 Tsurkan, I. P. 3513, 4293
 Tsurushima, H. 2914, 6133
 Tsvetanov, D. D. 1100
 Tsvetkov, R. 7048, 8952
 Tsvetkov, V. 4336
 Tsvetkova, A. G. 2585
 Tsvetova, N. T. 1923
 Tsyplenkov, A. E. 6913
 Tszu, C. A. L. 8350
 Tu, C. C. 2151
 Tucker, D. P. H. 3108, 3995, 6339
 Tudosescu, O. 7341
 Tueva, O. F. 161
 Tugwell, B. L. 6651
 Tukey, R. B. 950, 4281
 Tumbure, I. A. 5867
 Tulemisova, K. A. 6792
 Tulupova, A. A. 8612
 Tumanov, I. I. 4310, 6671
 Tumanova, E. I. 7613
 Tumanova, R. N. 5807, 8486
 Tunisia, Institut National de la Recherche Agronomique 4155
 Tunisia, Institut National de la Recherche Agronomique, Laboratoire de Viticulture 3561
 Tunisia, Institut National de la Recherche Agronomique, Laboratoire d'Arboriculture Fruitière 3981, 4944
 Tupkari, S. V. 4773
 Tupý, J. 8873
 Turetskaya, R. Kh. 193, 4513
 Turgeon, A. J. 5445, 5446
 Turgeon, R. 5961
 Turkey, Turkish Phytopathological Society 8282
 Turkmenbaev, B. A. 5191
 Turkov, V. D. 5158
 Turner, D. W. 1539
 Turner, J. N. 4148
 Turner, M. K. 2739
 Turner, N. C. 3712, 4478, 4928, 6923
 Turner, P. D. 8168, 9187
 Turova, A. D. 3967
 Turovskaya, L. A. 5700
 Turovskaya, N. I. 2543, 3381
 Turovsev, M. I. 5017
 Turovtsev, N. I. 3439
 Turquand, E. D. 3872, 3875
 Turrell, F. M. 5550
 Tursin, Yu. S. 5534
 Tutberidze, B. D. 3101, 5545, 7125
 Tutevich, M. T. 5855
 Tuz, A. S. 5781
 Tuza, S. 1679
 Tvorus, E. K. 2802
 Tyagi, B. N. 361
 Tyazhel'nikov, A. D. 924
 Tyl, M. 3082
 Tyler, K. 8614
 Tyurina, E. V. 6283, 8988
 Tyurina, M. M. 1774, 8367, 8399
 Tzanni, H. 3861
 Uchida, M. 3135
 Uchytill, L. E. 2298
 Udayashankar, A. 4666, 9062
 Uddin, M. N. 1541, 4833
 Udry, V. 1799, 5315
 Ueda, H. 2272
 Uehara, G. 6374, 8212
 Uexkull, H. R. von 3188
 Uffelen, J. A. N. van 5216
 Uffelen, L. G. van 8751
 Ugaz, O. S. 7235
 Ugolik, M. 5742
 Uhl, N. W. 3953
 Uhlinger, R. D. 5414
 Uhling, J. 8895
 Uittinen, J. J. 1676, 1677
 UK, Agricultural Development and Advisory Service, South Western Region 3372, 3615
 UK, Agricultural Development and Advisory Service, West Midland Region 3347, 3534, 4742, 5885, 6128, 8316, 8583, 8838
 UK, Arthur Rickwood Experimental Husbandry Farm 601
 UK, Biochemical Society 6471
 UK, British Gladiolus Society 5422
 UK, Commonwealth Secretariat 4120
 UK, Department of Agriculture and Fisheries for Scotland 2485
 UK, East Malling Research Station 7489, 8139, 8317, 9009
 UK, Economic Development Committee for Agriculture 3341
 UK, Edinburgh School of Agriculture 3552, 3614, 3871
 UK, Efford Experimental Horticulture Station 3373, 3533, 4605, 5884
 UK, Fairfield Experimental Horticulture Station 4622, 6773
 UK, Forestry Commission 6483
 UK, Glasshouse Crops Research Institute 3685
 UK, John Innes Institute 3346, 3535, 3612, 3832
 UK, Kirtton Experimental Horticulture Station 598, 732, 733, 1872, 3538, 3610, 7907
 UK, Lee Valley Experimental Horticulture Station 6774
 UK, Letcombe Laboratory 3521, 5943
 UK, Long Ashton Research Station 903, 1856, 1938, 2155, 2330, 2380, 2449
 UK, Luddington Experimental Horticulture Station 3371, 3515, 3613, 3833
 UK, Macaulay Institute for Soil Research 8584
 UK, Ministry of Agriculture, Fisheries and Food 270, 866, 1690, 1810, 2835, 3299, 3351, 3369, 4123, 4926, 5050, 5195, 5692, 6186, 7315, 7894, 7905, 8300, 8301
 UK, Ministry of Agriculture for Northern Ireland 4172, 4606, 5076, 5154
 UK, Mushroom Growers' Association 4119
 UK, National Agricultural Advisory Service, East Midland Region 867
 UK, National Institute of Agricultural Botany 5149
 UK, National Institute of Agricultural Engineering 2487, 2672, 2743, 5752
 UK, National Vegetable Research Station 1934
 UK, North of Scotland College of Agriculture 1855, 1936, 2153
 UK, Pea Growing Research Organisation Ltd. 3611
 UK, Rosemaund Experimental Husbandry Farm 2537, 3040, 3041

- UK, Rosewarne Experimental Horticulture Station 3834, 4366, 5096
- UK, Rothamsted Experimental Station 5153
- UK, Royal Horticultural Society 7035
- UK, Royal National Rose Society 5470, 5474
- UK, Scottish Horticultural Research Institute 3514, 3874, 4365
- UK, Society of Chemical Industry 4121
- UK, Stockbridge House Experimental Horticulture Station 529, 1937
- UK, Wye College Department of Hop Research 3954
- Ukai, N. 8805
- Ulicheva, G. M. 1455, 5533
- Ulrychová, M. 241
- Ul'yanishchev, A. S. 2568
- Ul'yanov, A. M. 8415
- Ul'yanova, M. S. 5875
- Umeda, K. 2136
- Umelter, H. 7885, 7956
- Umiel, N. 2138, 2142
- Umpelby, R. A. 3958
- Umpleby, D. 5470
- Undan, R. C. 6884
- Underbrink, A. G. 5418
- Underwood, V. H. 1898
- Unger, K. 7639
- Unger, S. 917, 918
- Ünlüer, O. 130, 3630
- Unser, G. 3021
- Unsworth, M. H. 2039
- UnterEcker, H. 659, 2079
- Unterholzner, O. 5169
- Untilova, A. S. 4975
- Unwin, C. H. 1268
- Uota, M. 1157
- Upadhyay, M. D. 2435
- Upadhyay, S. K. 3224
- Upadhyaya, J. 859, 4820
- Uppal, D. K. 5562, 8059
- Upreti, H. 2362
- Urdahl, W. A. 2204, 8909
- Uriarte, J. R. 3679
- Uribe, A. 9190
- Uribe H., A. 3161, 5618
- Uriu, K. 2424, 2630, 4167, 4239, 7424
- Urmantsev, Yu. A. 8680
- Urueta Sandino, E. 5637
- Urushadze, U. D. 3159
- USA, American Society for Horticultural Science 448, 3335
- USA, Colorado State University 3300, 3357, 3617
- USA, Cornell University 5179
- USA, Department of Agriculture 899
- USA, Hawaii Agricultural Experiment Station, University of Hawaii 1940, 6130, 6324, 6382
- USA, Hawaiian Sugar Planters' Association Experiment Station 9221
- USA, Institute of Food and Agricultural Sciences, Florida University 437, 451, 1530, 2375, 4367, 4945, 5078, 6129, 6383, 6692, 8051, 8585, 8834
- USA, Michigan State University, Department of Horticulture 3616
- USA, Michigan State University Agricultural Experiment Station 7490, 7601, 8319, 8839
- USA, Michigan State University, Department of Horticulture 3348, 3516, 3835
- USA, Mississippi Agricultural and Forestry Experiment Station 1706, 1935, 2152, 2433
- USA, National Weather Fruit-Frost Service 6335
- USA, New Mexico State University Agricultural Experiment Station 3349, 3618, 3836
- USA, North American Lily Society 5427, 5428
- USA, North Carolina State University Agricultural Experiment Station 6058
- USA, Northern Nut Growers Association Inc. 25
- USA, Spectral Survey of Irrigated Region Crops and Soils 599, 600, 790, 791
- USA, University of Georgia Agricultural Experiment Stations 8320, 8525
- USA, Washington State University 24, 324, 1130, 1315, 5077
- Ushiyama, K. 3128
- Uslu, İ. 8528
- Usman, K. M. 8880
- USSR, Orlovskaya Plodovo-Yagodnaya Opytnaya Stantsiya 5699
- USSR, Severokavkazskii Zonal'nyi Nauchno-Issledovatel'skii Institut Sadovodstva i Vinogradarstva 5700, 5701
- Uyemoto, J. K. 470, 5853, 5854, 7684
- Uys, D. C. 588
- Uzcátegui L., C. 8197
- Vaadia, Y. 3325
- Vacek, M. 5506
- Vachun, Z. 2611, 3436, 3468, 5756, 7421, 8427
- Vadachkoriya, Ts. T. 3019
- Vadhwa, O. P. 4485
- Vago, C. 17
- Vagt, W. 8376
- Vaidyanathan, L. V. 5307, 5308, 5309
- Vaintraub, F. P. 4504
- Vajna, L. 2671
- Vakar', B. G. 6579
- Vakhrusheva, T. E. 2139
- Vakis, N. 1505
- Valat, C. 5853
- Valdebenito S., R. M. 5007
- Valdivia M., G. 1248
- Valencia A., G. 1574, 4055, 9166
- Valenzuela, J. 535, 8494
- Valenzuela, L. 8991
- Valette, R. 1151
- Valikhanova, G. Zh. 8722
- Valk, G. G. M. van der 2257, 3435
- Valk, G. G. M. van der 5436, 8902, 8903
- Vallejos, W. E. 4518
- Valmayor, R. V. 3210
- Valpuesta, M. 8112, 9111, 9112
- Valuiko, G. G. 5875
- Valutskaya, A. H. 6283
- Van Dam, J. 8913
- Van, M. T. T. 3638
- Vanachter, A. 8779
- Vančura, V. 189
- Vandenbergh, J. 4559
- Vandercook, C. E. 1508
- Vanderhoeft, L. N. 226
- Vanderwey, A. 4811
- VanDerWoude, W. J. 2951
- Vanek, G. 577
- Vaněk, V. 2814
- Vang-Petersen, O. 3402, 6553
- Vanhaelen, M. 3059
- Vanhouche, P. 4325, 5822
- Vanin, I. I. 44, 1048
- Vanluchene, I. 4673
- Vanoni, F. 2781
- Vanwezer, J. 7527
- Varadharajan, G. 853
- Vardar, Y. 3096, 9067
- Vardaro, P. M. 3904, 7864
- Varela de Vega, A. 9128
- Vargas, G., E. 5620
- Vargas, J. M., Jr. 2266, 6196, 6198
- Vargová, E. 236, 2096
- Varley, G. C. 2501
- Varma, A. 7086
- Varma, G. C. 5582
- Varma, I. D. 7237
- Varna, V. E. 4251
- Varnaite, R. N. 6308, 6309
- Varner, J. E. 2063
- Varshney, I. P. 353
- Vartanian, N. 8985
- Vartija, R. 2738
- Vasak, V. 5427
- Vasconcellos, E. F. C. 3757, 5296, 5297
- Vasev, A. 8438
- Vasev, V. 2725
- Vashchinskaya, N. V. 4215
- Vashistha, R. N. 1194
- Vasilcik, E. M. 4128
- Vasilev, V. 6070
- Vasilev, V. N. 458, 2536, 3363
- Vasil'eva, L. I. 8450
- Vasil'eva, V. N. 4976, 6014
- Vasin, V. I. 8901
- Vas'kovskii, M. D. 2003
- Vasseur, J. 7624, 7726
- Vassilev, G. 2799
- Vassilev, G. N. 3744, 6803
- Vasudeva, N. 8158
- Vasyukova, V. A. 654
- Vasyuta, G. G. 6269
- Vater, J. 1836
- Vaughan, J. G. 4736, 5488
- Vávra, M. 2511, 4254, 8455
- Vazhenina, Z. G. 2545
- Vaziri, C. M. 2468
- Vázquez B., V. 4563
- Vazquez Roncero, A. 2427
- Vazyula, A. G. 7499
- Vedantham, T. N. C. 4765
- Vedder, P. J. C. 3824
- Vedder, P. J. C. 262, 699, 6121, 7827
- Veech, J. A. 2120
- Veen, H. 3900, 4940
- Veerman, J. A. 4434
- Vega, E. 2724, 4258
- Vega, F. A. 1453
- Vega, M. R. 7748
- Vegetti, G. 1169
- Vegh, I. 8601
- Véghelyi, K. 6611, 7328, 7429
- Veihmeyer, F. J. 4160
- Veinbrants, N. 966, 974
- Veitch, G. J. 7936
- Vekshin, B. S. 8045
- Velasquez, F. 8131
- Velasquez O., J. 780
- Velde, G. V. 6286
- Veldhuis, M. K. 2412
- Velev, B. 1266, 5211, 5343, 8740
- Vélez, A. 9265
- Vélez Angel, R. 5666, 8154
- Velez, G. C. de 6884
- Veliath, J. A. 2131
- Velichkova, S. 498
- Velikar, S. G. 1112
- Veliky, I. A. 8591, 9025
- Velkov, L. 985
- Velkov, V. 506, 2566, 3466
- Vello, F. 3180
- Vendrig, J. C. 8986
- Venekamp, J. H. 8701
- Venezuela, Estación Experimental de Cacao 6391
- Venkata Ram, C. S. 8272
- Venkataramani, K. S. 8120
- Venning, F. D. 9145
- Venstrom, D. W. 5368
- Vent, L. 1420
- Venter, F. 144
- Ventura, J. 3645, 4525
- Venugopal, G. 8048
- Verboom, H. 7875
- Vercesi, B. 660, 5291
- Verde, G. 8103
- Verderevskaia, N. D. 1240
- Verderevskaia, T. D. 7554
- Verderevskii, D. D. 5825
- Verdonck, O. 4689, 5419, 7291
- Verdu, J. 3139, 8088
- Vereshchagina, I. V. 4613
- Vergnano Gambi, O. 5726
- Vergnaud, P. 1258
- Verhaegh, A. P. 2105
- Verheij, E. W. M. 3401, 7354
- Verhoeff, K. 1296
- Verhoyen, M. 4232
- Verlaat, J. G. 7617, 8714
- Verlind, A. L. 2245
- Verma, A. K. 8881
- Verma, A. N. 143, 1011
- Verma, J. P. 3316
- Verma, V. S. 3086, 3966
- Vernet 4027
- Vernon, A. J. 1547
- Verschuur, A. F. C. 887
- Versteeg, W. 7923
- Verwer, F. L. J. A. W. 5801, 7354
- Verzilog, V. F. 920, 6987
- Veselova, E. P. 1205
- Veselova, T. V. 6727, 8508
- Veselovskii, I. A. 5316
- Veselovskii, V. A. 6727, 8508
- Vesely, Z. 2367
- Vessey, J. C. 8691
- Vest, G. 6885
- Vestheim, S. 5082
- Větvicka, V. 4705
- Veyrat, G. 7301
- Viard, P. 4227
- Vickery, H. B. 1673
- Vickery, L. E. 162
- Vidaver, W. 136, 1976
- Vidnov, B. 7372, 7386, 7413
- Vidhyasekaran, P. 6887
- Vidović, O. 8674
- Viehmeier, G. 5414
- Vieira, C. 172, 1208, 3694, 3697, 4467, 5235, 5262, 8671
- Viel, P. 1000
- Vieria da Silva, J. 8985
- Vieru, I. 2
- Vig, P. 4946
- Vigl, J. 6560
- Vigorov, L. I. 4954, 8446
- Viił', Yu. 2025
- Vijayan, K. M. 4053
- Vijver, L. M. van der 3003
- Vijverberg, A. J. 7878
- Vik, J. 2738, 3760, 6027
- Vikmane, M. Ya. 5990
- Vikulina, L. A. 6074
- Vilardebo, A. 827, 6387, 9133
- Vilchez, M. 3014
- Viljoen, N. M. 3232, 8162
- Villalon, B. 2847
- Villegas, C. N. 5365
- Villiers, E. A. de 6373, 7168
- Villiers, O. T. De 7478
- Villiers, T. A. 3007, 5181
- Villtoft, H. 3298
- Vimaladevi 4666
- Vince, D. 5687
- Vincent, A. P. 1470, 4808, 6330, 8090, 9102
- Vincent, J. C. 6395
- Vincent, L. E. 813, 8107
- Vincinaux, C. 6942
- Vine, B. H. 3201
- Vines, H. M. 1389, 4249, 5466
- Vinogradov, A. V. 1762
- Virden, J. 3047
- Virdi, B. V. 1054, 1055
- Virgin, H. I. 5687
- Viro, M. 8308
- Vis, E. G. 1515
- Visagie, T. R. 5060
- Vishanska, Y. V. 5069
- Vishanska, Yu. 985
- Visscher, H. R. 7829
- Visser, C. J. 8417, 8452
- Visser, T. 7312, 7433
- Vissia, R. 3313
- Viste, K. L. 3334
- Viswanadham, R. K. 8048
- Viswanath, K. R. 8145
- Viswanath, S. 6251, 6253

Viswanathan, N. 3076
Viswanathan, P. R. K. 5622, 8153
Visweshwara, S. 4857
Visweswariah, K. 1534
Vitagliano, C. 2421, 2425
Vitanov, M. 4523, 6655, 7329, 7469
Vitkov, M. 171
Vitkovskii, V. L. 1713, 4154, 4299
Vittori, V. 3472
Viyayan, K. P. 300
Vizer, B. 7323
Vlach, E. 1017
Vlahos, M. V. 8530
Vlakhova, M. G. 2210
Vlašić, A. 6616
Vlashingin, V. P. 4974
Vlasov, Yu. I. 7792
Vlasyuk, P. A. 5284, 6005
Vlček, F. 4451, 5213, 5881
V"lchev, S. 3796
V"lchev, V. 1896, 2711, 6717
Vlitos, H. J. 5687
Vlora, A. K. 551
Vnuchkova, V. A. 2857
Vnuchicharova, M. 6896
Vodret, A. 3574
Voeller, J. E. 1044
Vogel, G. 1987, 5923
Vogel, J. 7301
Vogel, R. 5543
Voigt, E. 580, 4351
Vořtovich, K. A. 5825
Volcani, Z. 3776
Vol'de, M. S. 2561
Volk, G. M. 2174, 4670, 6193
Volken, P. 3815
Volkov, F. A. 8348
Volkova, S. A. 1431, 3051
Vollmer, C. M. 8642
Vollosovich, A. G. 2333, 5531
Volodina, E. V. 4312
Volosky Y., E. 258, 3756
Vol'vach, P. V. 4211, 6615, 6618
Vondráček, J. 3416, 3438, 3441, 3446
Vonica, A. 8478
Vonica, I. 8478
Vonk-Noordegraaf, C. 6231, 6990
Vonnahme, P. 9203
Voogt, S. 8606
Vora, V. C. 6463
Vorob'ev, N. E. 2811
Voronchikhina, Z. N. 2918
Voronina, M. V. 5362, 6928
Voronkova, F. V. 6488
Voronovich, D. Ya. 5115
Vos, A. 7926
Vos, H. 5442
Vos, N. P. de 6180
Vosamäe, H. 268
Voskresenskaya, N. P. 1673, 8712
Voss, G. 3298
Voth, V. 1879
Votický, Z. 9013
Vötsch, J. 8355
Vovlas, C. 4390
Voznesens'kii, A. M. 5865
Vraný, J. 6038
Vreman, H. J. 219
Vrie, C. van de 6596, 8331
Vries, D. P. de 7433
Vries, F. W. de 4912
Vries, F. W. T. P. de 3296
Vroomen, C. O. N. De 2228
Vrzalová, J. 3054
Vučić, N. 6515
Vuittenez, A. 497, 5853
Vujančić-Varga, D. 6544
Vulsteke, G. 167, 1160, 5252, 8672, 8692
Vuong Huu Hai 406
Vuurst-De Vries, R. G. Van der 1804
Vygodskaya, N. N. 6487
Vyskrebentseva, E. I. 2778
Vyskvarko, G. G. 6757
Vysokos, T. Ya. 197
W., D. J. 1658
Waard, P. W. F. De 6479
Wacquant, C. 6698
Waddington, D. V. 3893
Wade, D. R. 1361
Wade, E. K. 8392
Wadhi, S. R. 3243
Wadhvani, A. M. 860
Wadsworth, G. A. 718
Wager, H. G. 5290
Wager, V. A. 2172
Waggoner, P. E. 4
Wagner, H. 2371
Wahab, F. K. A. El 2438
Wahab, S. M. A. 3049
Waheed, A. 666
Wahlberg, I. 2340
Wain, R. L. 1704
Waines, J. G. 1356, 6168
Wainstein, P. 7303
Wainwright, S. H. 5408
Waisel, Y. 2369
Waister, P. D. 1057, 1877, 5808
Waks, J. 1506, 7152
Waldron, A. C. 546
Waldron, J. C. 8191
Wali, Y. A. 449, 2439, 2440
Walker, B. 9265
Walker, J. T. 2987
Walker, L. A. 1542
Walker, S. E. 2853
Walker, W. F. 4744
Walker, W. M. 5997
Walkey, D. G. 4184
Walkinshaw, C. H. 4380
Walkof, C. 8766
Wallace, A. 1480, 2028, 6479
Wallace, D. H. 188
Wallace, J. M. 2390
Wallace, R. F. 2125
Wallen, V. R. 179
Waller, G. D. 2088
Waller, G. R. 4754, 6162, 6995
Waller, J. M. 1575, 4862
Wallerstein, I. 4807, 8083
Wallher, S. J. 8956
Wallin, A. 7819
Wallis, F. M. 8608
Wallis, L. W. 3872, 7011
Wally, Y. A. 449, 2439, 2440, 2842, 8756
Walmsley, D. 4423
Walton, D. C. 2803, 2804
Walton, T. 5804
Wandas, F. 2738
Wang, C. Y. 1841, 1842, 5791, 6648
Wang, D.-I. 1158
Wang, H. H. 8822
Wang, S. Y. 1842, 5767, 6648
Wang, Z. N. 9257
Wanic, D. 968
Wanjari, K. B. 5966
Wanner, H. 4863, 4867
Wara-Aswapati, O. 6850
Ward, E. W. B. 1268, 5324
Ward, G. M. 7790
Ward, P. F. V. 3650
Ward, R. J. 3669
Warden, J. 8927
Wardle, G. A. 5001
Wardowski, W. F. 4010, 4017
Wargadipura, R. 4762
Warnaars, B. C. 2054
Warren, N. M. 1296
Warsito, N. T. 2463
Warsito, T. 6422
Wassel, G. M. 1399, 3079
Wassenaar, L. M. 3553, 7524, 7525
Wassink, E. C. 4640
Wastie, R. L. 1078, 6423, 6424, 8182
Watanabe, J. 5577
Watanabe, M. 3057
Watanabe, T. 1698, 2634, 2851, 4936, 5250, 5982
Waterman, P. G. 2361
Waters, W. E. 1376, 3897, 7027, 8852, 8931
Waterworth, H. E. 1745, 5465
Watson, A. G. 3316
Watson, D. P. 7962
Watson, J. 5796
Watson, R. 6236
Watson, T. 2942, 7794
Watt, K. E. F. 2501
Watt, W. B. 7724
Watters, E. D. 4389
Watterson, J. C. 5218
Wave, H. E. 4989
Wavhal, K. N. 8570
Way, M. J. 2501
Way, R. D. 7335
Wayland, J. R. 5226
Wearing, C. H. 147
Weathers, L. G. 363, 1168, 2387, 4635
Weaver, G. M. 5696
Weaver, R. J. 592, 2729, 7280, 8567
Weaver, W. H. 3702
Weaving, A. J. S. 1583
Webb, J. A. 5961
Webb, M. J. W. 1984
Webb, R. A. 1678, 6697
Webb, R. E. 3774
Weber, D. J. 2616, 4928
Weber, F. 7443
Weber, O. 1118
Weber, P. G. A. 1684, 5156, 5157, 6775
Webster, B. D. 3673, 5259, 6854
Webster, D. H. 5694, 5695, 5696
Webster, H. L. 680
Webster, I. 5422
Webster, J. M. 2484, 3807, 6090
Webster, W. J. 552
Weder, J. 5286
Wee, Y. C. 7219, 9196, 9197
Weerakoon, S. N. 6465
Weering, J. J. van 4069
Wehrmann, J. 7789
Weidensaul, T. C. 1680
Weidinger 2493
Weier, B. 36, 37, 38
Weigle, C. G. 5587
Weigle, J. L. 2128, 3680
Weihsing, J. L. 644, 722
Weijden, G. J. M. van der 7016
Weijman, A. C. M. 4396
Weiler, N. 1873, 7537
Weiler, T. C. 1348
Weinbaum, S. A. 3392
Weinberger, P. 7689
Weinstein, B. 8032
Weir, B. L. 1968, 5214
Weischer, B. 5853
Weiser, C. J. 2587, 5313, 7049, 7352, 7353, 8353
Weissleder, D. 4761
Weiss, A. 8529
Wejnar, R. 1129
Welch, H. J. 7035
Welch, N. C. 3636
Weldinger, G. 6496
Weldt, E. 8960
Welker, W. V., Jr. 2685, 2827
Wellensiek, S. J. 7745, 8726
Welling, H. 6496
Wellisch, P. 1679
Wellman, D. 8997
Wells, G. N. 3753
Wells, J. M. 8706
Welsh, M. F. 8388, 8390
Welte, E. 1570
Weltzien, H. C. 3316
Wendt, T. 5725
Wenham, H. T. 5859
Wenkam, N. 2435
Wensley, R. N. 5965
Werckmeister, P. 311
Werminghausen, B. 8850
Werth, K. 464
Wertheim, S. J. 1729, 1792, 4960, 7405, 7461, 8357, 8405
Wesenberg, B. G. 4709
Wesolowski, L. J. 2841
West Indies, Central Sugar Cane Breeding and the Barbados Sugar Cane Variety Testing Station 4080
West, S. H. 1647, 4088
Westaway, S. J. 4134
Westcott, D. E. 6105
Weste, H. L. 5871
Westermann, D. T. 8290
Western Samoa, Department of Agriculture, Forests and Fisheries 7602, 8122
Westigard, P. H. 8467
Weston, G. D. 5360, 8792
Weststeijn, G. 6087, 7795
Westwood, M. N. 2657, 4233
Wetherbee, P. J. 3668
Wettasinghe, D. T. 7265
Wetzel, H. 3886
Wetzold, P. 4567
Whalley, D. N. 1401
Whalley, W. M. 8719
Wheatley, G. A. 5374
Wheaton, T. A. 2410, 4814
Wheeler, B. E. J. 7013
Whelan, E. D. P. 1196, 1991, 8656
Whidden, R. 3125
Whisler, J. 6378
Whitaker, T. W. 5221, 5915
Whitcomb, C. E. 303, 4612
White, A. G. 6831
White, B. A. 6697
White, D. 5976
White, D. G. 4719
White, G. C. 866
White, J. C. 2800, 5102, 5909
White, J. M. 2768, 2868
White, J. W. 2950, 4128, 4659, 4660, 6983, 8857
White, R. 2349
White, T. K., Jr. 3192
Whitehead, A. G. 1254
Whitehead, V. B. 4259, 5812
Whiteside, J. O. 3127, 3132, 9094
Whitfield, F. B. 4826
Whitford, P. 3959
Whiting, D. A. 7955
Whiting, F. M. 372
Whitman, W. F. 9282
Whitmore, F. W. 5039
Whitney, J. D. 3137
Whitney, P. J. 4488
Whittaker, D. E. 2428
Whittemore, H. D. 8260
Whitten, M. J. 2501
Whittingham, C. P. 3296
Whittington, C. M. 1990
Whittington, W. J. 4556
Whitwell, J. D. 1161, 3659, 3669
Wi, H. 2432
Wickremasinghe, R. L. 6465, 6467
Wicks, G. A. 7702
Wickström, A. 7908
Widderich, W. 2497
Widholm, J. M. 2140
Widmer, R. E. 7893, 8858
Widodo, R. 6034, 6744
Wiebe, H.-J. 7644, 7659, 8293
Wiebe, J. 7558, 7679
Wiede, K. 2969
Wiedemann, R. 6278
Wiedenhoff, H. 8331
Wiederkehr, G. H. 8575
Wiedhopf, R. 8028
Wieland, H. 8306
Wienberg, D. 1876
Wiermann, R. 7911
Wiersma, C. 2164
Wierszylowski, J. 5742
Wightman, F. 196, 250, 251, 2029, 2127
Wijshoff, J. 6705
Wijshoff, J. W. 6706
Wikesjö, K. 3681, 3682
Wilbur, W. 1020
Wilcox, G. E. 1136, 3795, 4562, 4584
Wild-Altamirano, C. 7764

- Wild, B. L. 3428, 8410
 Wildbolz, T. 1766
 Wilde, R. C. de 3335
 Wildes, R. A. 8308
 Wilding, N. 5956
 Wildung, D. K. 7352, 8353
 Wilen, B. O. 4127
 Wilfret, C. J. 6163
 Wilfret, G. J. 7005, 7009, 8855
 Wilhelm, H. 6849
 Wilhelm, S. 1886, 3325
 Wilken, L. 6303, 8029
 Wilkes, J. M. 8676
 Wilkins, C. K. 4908
 Wilkins, H. F. 3870, 4658, 7049
 Wilkins, M. B. 8920
 Wilkinson, B. G. 8318
 Wilkinson, J. F. 304
 Wilkinson, R. E. 2643
 Wilkomirsky, T. 8991
 Wilks, J. H. 7938
 Will, A. G. K. 5887
 Will, H. 865, 6150, 6219, 8870
 Willam, A. 5383
 Willaman, J. J. 9015
 Willert, D. J. von 2941, 4678
 William, R. D. 1140
 Williams, B. J., Jr. 5485
 Williams, E. B. 3374, 5981
 Williams, J. A. 7189
 Williams, J. B. 1156, 1187, 2016
 Williams, J. H. 3299, 5163
 Williams, J. I. 8917
 Williams, J. M. 1564
 Williams, J. R. 8237
 Williams, K. 5001
 Williams, M. W. 3425, 4281, 5000, 5710, 8384, 8409
 Williams, N. H. 312, 4680
 Williams, P. H. 1985, 2760, 5218
 Williams, P. M. 8448
 Williams, R. D. 1042
 Williams, W. A. 4
 Williams, W. T. 5754
 Williamson, B. 5459
 Williamson, R. E. 2775
 Willigen, J. van 8505
 Wills, R. B. H. 487, 898, 1544, 1793, 1794, 1797, 6594, 7414, 8418
 Willson, K. C. 7267
 Willuhn, G. 1424, 2353, 2354
 Wilson, B. B. 7164
 Wilson, B. J. 648
 Wilson, D. M. 5358
 Wilson, F. 4139
 Wilson, H. P. 8770
 Wilson, J. F. 9009
 Wilson, K. A. 7723
 Wilson, K. I. 8291
 Wilson, L. A. 2618
 Wilson, M. 5332
 Wilson, P. D. 2124
 Wilson, R. H. 187
 Wilson, W. C. 3147, 3148, 4010
 Winder, J. A. 5612
 Winfield, A. L. 2260
 Winfield, P. J. 216
 Winkels, H. 1687
 Winkler, H. 6562
 Winoto, S., R. 6091, 7977
 Winsor, G. W. 1325, 4121, 6910
 Winter, J. A. T. de 4664
 Winter, K. 8930
 Winters, H. F. 5627
 Wirth, A. 995, 5059, 7348
 Wiseley, D. K. 2293
 Wiseman, J. S. 3661
 Wiskich, J. T. 148, 149
 Wismer, C. A. 4097, 6431
 Wiśniewska, J. 8407
 Wisniewski, W. 3060, 3061, 6318
 Witcher, W. 2995
 Witt, J. 1707
 Wittenbach, V. A. 2631
 Wittmann, O. 7092
 Wittwer, S. H. 4406
 Wodzicki, K. 2448
 Woess, F. 7018
 Wohlpert, A. 8592
 Wolanski, B. S. 1373
 Wolf, P. 6781, 8976
 Wolfe, T. A. De 3987
 Wolfram, B. 4234
 Wollman, H. 7989
 Wolstenholme, B. N. 1037, 3501, 4300, 7164
 Wolting, H. G. 7003
 Woltz, S. S. 2860, 6918, 6972, 7006, 8862
 Won, C. N. 475
 Wong You Cheong, Y. 4887
 Woo, L. K. 1444
 Woo, S. K. 6522
 Woo, Y. K. 4881
 Wood, A. V. 5081
 Wood, B. J. 5636
 Wood, F. A. 2925
 Wood, G. A. 472, 7474
 Wood, G. W. 536, 6685
 Wood, M. B. 3822, 7638, 7645
 Wood, R. A. 409, 411, 7249, 7259
 Wood, R. F. 7035
 Wood, R. K. S. 4928, 7705
 Woodbridge, C. G. 3493, 5932, 8465, 8863
 Woodcock, D. 7388
 Woodham, R. C. 575, 5853
 Woods, M. J. 240, 7606
 Woodward, C. J. 6586
 Woodward, J. R. 548, 3558
 Woolhouse, A. R. 7921, 8918
 Woolley, V. A. 1432
 Woollorton, L. S. C. 5934
 Workman, R. B. 5919
 Worley, J. F. 3720, 4726
 Worley, R. E. 1036, 1845, 2653, 3502, 7464, 8473
 Worraker, E. 3398
 Worthen, L. R. 5880
 Worthington, J. T. 3434
 Woude, W. J. Van Der 2951
 Wragg, S. R. 6654
 Wrazidlo, W. 6276
 Wredin, A. 115
 Wright, A. N. 615, 7302
 Wright, D. J. 2046, 4493
 Wright, E. M. 4496
 Wright, S. T. C. 3296
 Wright, W. R. 2756, 8515
 Wrigley, J. W. 747, 7936
 Wu, C. T. 429
 Wu, L.-C. 7825, 7828
 Wu, M. H. 5652
 Wu, M. T. 2070, 4485, 6104, 7326, 8803
 Wu, W.-N. 2349, 2370
 Wucherpfennig, K. 3600
 Wuchner, A. 3755
 Wuest, P. J. 3829, 4601, 6956
 Wuidart, W. 8165
 Wunderlich, A. 1917
 Wunsch, A. 144, 4743
 Wurziger, J. 4062
 Wutscher, H. K. 6332, 9089
 Wyatt, I. J. 4602
 Wyk, B. J. van 5640
 Wylie, W. D. 7390
 Wyse, D. 8684
 Wysoki, M. 7459
 Xafis, C. 888
 Xiloyannis, C. 83
 Yablonskii, E. A. 3479
 Yadav, I. S. 2707, 6718
 Yadav, J. S. P. 8638
 Yadav, S. N. 2980
 Yadav, T. D. 3229
 Yadava, R. B. R. 1535
 Yadava, U. L. 1777, 4995
 Yagi, M. 2430
 Yagita, H. 8451
 Yakara, H. 2217
 Yaklich, R. W. 5988
 Yakovleva, V. A. 4701
 Yakovuk, V. A. 6635
 Yakushev, V. I. 1740
 Yakuwa, T. 2080, 8735
 Yamada, M. 1780
 Yamada, S. 2389, 3124, 3151, 4799
 Yamada, Y. 4578
 Yamagouchi, M. 5303
 Yamamoto, K. 6453
 Yamamoto, M. 2430
 Yamamoto, R. 2822
 Yamamoto, Y. 5687
 Yamanaka, H. 8800
 Yamato, H. 9093
 Yamauchi, T. 3005
 Yanagawa, H. 4517
 Yanagisawa, I. 3068
 Yanase, M. 7140
 Yanazawa, T. 6022
 Yang, C. B. 674, 6522, 6834, 8667
 Yang, S. 9243
 Yang, S. F. 967, 2590, 6591
 Yang, S.-K. 4880
 Yang, T. C. 3698
 Yanin, G. I. 565
 Yankulov, I. 6288, 6289
 Yanyshka, A. 5881
 Yarauntaiah, R. C. 8017
 Yarbobaev, N. D. 6336
 Yaroshenko, B. A. 4271
 Yaroslavets, G. D. 1386
 Yaroslavtseva, N. I. 4194
 Yaroslavtseva, Z. P. 3909
 Yarwood, C. E. 5251
 Yaseen, M. 4430
 Yashchenko, N. P. 2229
 Yashnik, K. I. 4993
 Yasnosh, V. A. 7146
 Yassin, A. M. 5346
 Yasunobu, Y. 2730, 3169
 Yates, G. J. E. 1387
 Yates, M. J. 2347
 Yates, R. A. 1652, 1653, 8256, 9265
 Yatsenko, A. M. 6736
 Yatsuno, A. I. 3967
 Yau, C.-K. 5382
 Yavorskaya, T. K. 7743
 Yaw-Pan Chang 5453
 Yeager, J. 524
 Yeatman, J. N. 3434
 Yee, W. 5585
 Yih-Ming Chen 4482
 Yih, R. Y. 3334
 Yilmaki, A. 6195
 Yogaratnam, N. 5642
 Yokoi, M. 5460
 Yokomizo, H. 7140
 Yokosawa, R. 7654
 Yomo, H. 5992
 Yoneyama, S. 1999
 Yoo, K. C. 1203
 Yook, C. S. 1446, 2304, 3067, 5519
 Yoon, C. J. 952
 Yoong, S. C. 6384
 Yoshida, K. 2625, 2742
 Yoshida, R. 6719
 Yoshida, S. 1673
 Yoshikawa, H. 7791
 Yoshimura, K. 2651
 Yoshizaki, M. 7768, 8080
 Youdeowei, A. 2443
 Youm, D. Y. 1367
 Young, K. 4158
 Young, L. M. 335
 Young, R. 2407
 Young, R. E. 7176
 Young, T. W. 5631, 5632, 7946
 Youngner, V. B. 738
 Younos, C. 3949, 3950
 Yousef, M. 2890
 Yousef, R. T. 4770
 Youssef, M. 6470
 Ystaas, J. 2489
 Yu, I. C. 544
 Yu, S. J. 2305, 2313
 Yu, T. J. 6834, 8667
 Yu, T. Y. 1367
 Yugoslavia, Kmetijski Institut Slovenije 3350, 3517, 3619
 Yukhananov, D. Kh. 3967
 Yuki, W. 4797
 Yuldasheva, L. M. 5203
 Yumoto, T. 6917
 Yun, H. T. 728
 Yun, J. K. 1029
 Yunis, H. 3808
 Yuraphat, T. 7104
 Yurchenko, V. V. 5158
 Yurina, O. V. 5954, 7673
 Yurku, A. I. 6757
 Yusufov, A. G. 1320
 Zabbia, A. J., Jr. 655
 Zabiayko, V. O. 6722
 Zabluda, G. V. 7117
 Zabrosae, V. D. 3430
 Zacha, V. 6159
 Zadrail, F. 6124
 Zadrail, F. 6958
 Zadrail, W. W. 407
 Zafar, A. M. 2809, 6886
 Zagaja, S. W. 67, 7333, 8346
 Zagatto, A. G. 8652
 Zagorcheva, L. 3651
 Zahara, M. 1994
 Zaher, M. A. 29, 366
 Zahn, F.-G. 996, 997, 7428, 8440
 Zaidova, K. A. 5713
 Zaitschek, D. V. 6314
 Zakari, I. 5599
 Zakhariyeva, T. 6674
 Zakharova, A. A. 193
 Zakharyan, V. S. 6647
 Zaki, A. Y. 3049
 Zaki, M. M. 6640
 Zakotin, V. S. 2569
 Zaleska, Z. H. 8685
 Zaletaeva, Yu. 293
 Zal'kain, A. A. 4440
 Zal'tsfas, A. A. 3951
 Zambia, Department of Agriculture, Research Branch 7284, 8144, 8586, 8587
 Zandvoort, R. 7850
 Zankov, Z. 1088, 1896, 1897, 6717
 Zanon, A. 8810
 Zanutto, G. 6244
 Zanutto, I. 3855, 5479, 6244
 Zapata, A. 7272
 Zaprometov, M. N. 3282, 6308
 Zarkua, M. D. 3019
 Zarnadze, D. N. 3266, 9274
 Zaske, J. 5512
 Zatyko, I. 7371
 Zatyko, J. 6662
 Zatyko, J. M. 6678
 Zatyko, J. M. 6851
 Zauberman, G. 358, 1465
 Zawadzka, Z. 8897
 Zaziab, F. 8398
 Zazerini, A. 3805
 Zderkiewicz, T. 8980
 Zdorov'eva, E. N. 1431, 3857
 Zdrufkovskaya-Rikhter, A. I. 7127
 Zeck, W. M. 2394
 Zee, S.-Y. 3163
 Zeeman, A. S. 6743
 Zeeuw, D. de 4124
 Zehler, E. 7788
 Zeld, F. A. 2894
 Zeid, M. 201
 Zeiger, D. C. 4203
 Zelenava, I. V. 1227, 2062
 Zelengur, N. E. 7082
 Zelenka, L. P. 1141
 Zelenskii, M. A. 3420
 Zelitch, I. 4
 Zembry, A. 2716
 Zemlyanov, V. N. 7340, 7345
 Zende, G. K. 8216, 8222
 Zengerle, K. H. 2752, 5922
 Zenon-Roland, L. 8590
 Zentmyer, G. A. 3316
 Zernov, N. P. 5084
 Zeroni, M. 1811, 2636
 Zettler, F. W. 2974, 2975
 Zevallos, A. C. 9142
 Zeven, A. C. 1351
 Zeyen, R. J. 8962
 Zhdanov, V. N. 5699
 Zhdanov, V. V. 1861
 Zhecheva, Zh. 3651

Zhecheva, Zh. D. 4417
 Zhelev, D. 2737
 Zhelev, I. 4192, 4193
 Zhelev, V. 6494, 8302, 8303
 Zhestyanikova, L. L. 4520
 Zhidebaev, K. Zh. 5720
 Zhitkov, V. S. 905
 Zhmurko, L. A. 59, 7417
 Zholkevich, V. N. 6857
 Zhuchenko, A. A. 8288
 Zhukov, A. S. 5701
 Zhukova, L. A. 112
 Zhukova, N. V. 1206
 Zhukova, R. V. 5701
 Zhulavskaya, M. N. 5717,
 5741
 Zhulid, L. P. 5701
 Zhulya, V. M. 4307
 Zhuravleva, L. M. 18
 Zidan, Z. 1479
 Zied, E. N. Abou 9019
 Ziegler, W. 4386
 Ziehl, O. A. 2088
 Zieslin, N. 3920, 7949
 Zika, J. 3421
 Zilai, J. 6720, 6766
 Zilberstein, A. 2201
 Zilberstein, Y. 7900
 Zilkha, M. 3763
 Zimmer, K. 5484, 7951, 7952,
 8885, 8932
 Zimmerman, E. 739
 Zimmerman, R. H. 4725,
 5689, 6525, 6526
 Zimmermann, F. J. P. 8671
 Zink, F. W. 4412
 Zinkernagel, V. 2206, 3325
 Zinzi, R. 5845
 Zioni, E. 4337
 Zito, F. 3365
 Zitter, T. A. 5894, 5912, 6040,
 6041
 Ziv, D. 3632, 4037, 4040
 Ziv, M. 6174
 Živanović, V. 2519, 2522
 Zobel, R. W. 3814
 Zobenko, L. P. 1411
 Zoborský, I. 7096
 Zocca, A. 977, 2531, 4267,
 6627
 Zoeten, G. A. de 2816, 5281
 Zohren, E. 7094
 Zoloedova, S. F. 7066
 Zolotovitch, G. 338, 3952
 Zonev, D. 6895
 Zootra, D. 3367, 3776
 Zotov, V. V. 7577, 8564
 Zouaghi, M. 5208
 Zsaddon, B. 5528, 6284
 Zubarev, F. P. 7111
 Zuccardi, R. B. 9244
 Zucconi, F. 4825
 Zuck, D. A. 3946
 Zucker, M. 1673
 Zueva, N. P. 2675
 Zuluaga Cardona, I. 389
 Zuluaga, V. J. 4055
 Zwack, F. 342, 6279, 9010
 Zwar, J. A. 8044, 8640
 Zwaving, J. H. 1425
 Zwet, T. van der 4275, 5049,
 5786, 6637
 Zwick, R. W. 8467
 Zwicky, P. 3577
 Zych, C. C. 8491
 Zykova, T. I. 6580
 Zyl, E. J. van 8452
 Zyl, H. J. van 4282, 8322
 Zylka, D. 64
 Zymalkowski, F. 7104

SUBJECT INDEX

- Abgrallaspis cyanophylli*, biological control, avocado pests 3983
- Absinth diseases**, *Verticillium dahliae* 4739
- Absinth plant**
- ascorbic acid, content, soil types 6246
 - glycosides, content, soil types 6246
- Absinth soil**, types, plant composition 6246
- Abutilon spp.**
- growth substances
 - responses
 - aminozide, annual report, UK 2155
 - chlormequat, annual report, UK 2155
- Acalymma vittata**
- host preference, cucumber and gherkin pests 2772
 - varietal resistance, cucumber and gherkin pests 1182
- Acantholimon spp.**
- flower, biology 6988
 - plant, anatomy 6989
 - pollen, studies 6988
- Acanthopanax sessiliflorum**, composition 3961
- Acanthophyllum sordidum**, saponins 3967
- Acanthoscelides obtectus**
- bean (*Phaseolus*) pests 5262
 - irradiation, gamma rays, sterilization, bean (*Phaseolus*) pests 2024
 - resistance, bean (*Phaseolus*) pests 182
- Acanthospermum hispidum**, essential oil, medicinal properties 3016
- Acanthospermum hispidum**, as weeds, peach 1016
- Acaphylla theae**, tea pests, annual report, India 1657
- Acaricides**
- Acarben, injury, ornamental plants 7024
 - application, equipment, types compared, apple 2583
 - CELA K 673 5685
 - CELA S 2957 5685
 - chlorphenamide, injury, ornamental plants 7024
 - demeton, injury, chrysanthemum 6976
 - diazinon, pest resistance, chrysanthemum 6974
 - dicofol, injury, ornamental plants 7024
 - dimethoate, injury, ornamental plants 7024
 - dioxathion 1744
 - injury, ornamental plants 7024
 - ethion, pest resistance, chrysanthemum 6974
 - formetanate, injury, ornamental plants 7024
 - malathion, pest resistance, chrysanthemum 6974
 - methiocarb, tolerance, chrysanthemum, annual report, German Federal Republic 8837
 - monocrotophos, injury, chrysanthemum 6976
 - naled, pest resistance, chrysanthemum 6974
 - oil formulations, injury, apple 473
 - Omite, injury, ornamental plants 7024
 - oxydemeton-methyl, injury, ornamental plants 7024
 - parathion ethyl, pest resistance, chrysanthemum 6974
- Plictran**
- injury, ornamental plants 7024
 - residues
 - fruit
 - apple 1770
 - pear 1770
 - quinomethionate, injury, ornamental plants 7024
 - tetradifon, injury, grapevine 7580
 - various, tolerance, ornamental plants 2173
 - Volck Oil, injury, ornamental plants 7024
- Acer**, annual report, Netherlands 4604
- Acer spp.**
- growing, UK 3906
 - leaf
 - anthocyanins 744
- Acer spp. contd.**
- leaf contd.
 - phenolic compounds 744
 - salinity, damage, shoot growth 4715
 - seed, germination 3906
- Aceria esculenti**, okra pests 8748
- A. gracilis**, raspberry pests, annual report, UK 3552
- A. guerreronis**
- coconut pests 389
 - annual report, Jamaica 4851
 - control, coconut pests 9155
- A. litchi**, litchi pests, annual report, India 4024
- Aceria mangiferae**, mango pests 3228-3229, 4065
- A. sacchari**
- cane age, sugar cane pests 9253
 - incidence, sugar cane pests 9253
 - varietal resistance, sugar cane pests 9227
 - vectors, streak, sugar cane pests 6443
- A. sheldoni**
- citrus pests 4003
 - control, orange pests 7145
 - orange pests 9095
- Aceria tulipae**
- garlic pests 228, 3757
 - onion pests 228
- Achillea castilaginea**
- essential oil
 - bactericidal properties 8005
 - content, seasonal variations 8005
 - medicinal properties 8005
- A. millefolium**
- coumarins 9016
 - essential oil 9016
 - fats 9016
 - glycosides 9016
 - organic acids 9016
 - resins 9016
 - saponins 9016
 - tannins 9016
- A. spp.**
- essential oil
 - composition 3064
 - content 7983
- Achimenes spp.**
- diseases, tobacco mosaic, varietal resistance 7017
 - growing, as pot plants, annual report, Canada 8836
 - varieties, disease resistance, tobacco mosaic 7017
- Achrysocaris promecothecae**, parasite of, *Promecotheca cumingi*, coconut 8143
- Achyranthes aspera**, medicinal properties 4753
- Acidanthra diseases**, annual report, Netherlands 2219
- Aconitum ferox**, alkaloids, content 5517
- A. koreanum**, alkaloids, content 5518
- A. napellus**
- alkaloids, determination 3962
 - diseases
 - Fusarium oxysporum* 3963
 - Verticillium albo-atrum* 3963
 - growing, as a medicinal plant 3963
- A. spp.**, alkaloids, application to, lettuce, pea 4754
- Acrolepia assectella**, leek pests 662
- Actinidia arguta**, alkaloids, content 2308
- A. spp.**, growing, USSR 4299
- Actinodaphne obovata**, alkaloids, content 2362
- Actinomyces griseoruber**
- extracts
 - plant treatment, cabbage 6792
 - seed treatment, cabbage 6792
- A. spp.**, antagonistic to, *Agrobacterium tumefaciens*, quince 5799
- Aculops berochensis**, plum pests 2658
- Aculus fokeui**, plum pests 2658
- A. schlechtendali**, population studies, apple pests 956
- Acyrtosiphon pisum**, pea pests, annual report, UK 5153
- Adelencyrtus miyurai**, parasite of, *Aulacaspis tegalensis*, sugar cane 9256
- Adenantha pavonina**, glycosides 9017
- Adhatoda spp.**, propagation, cuttings 2168
- Adonis spp.**, diseases, *Urocystis leimbachii* 2350
- Adoretus spp.**, cacao pests, annual report, Ghana 1777
- Adoxophyes orana**
- apple pests 478, 1765
 - annual report
 - Netherlands 5697
 - UK 8318
 - forecasting, light traps 1764
- A. reticulana**
- apple pests, annual report, German Federal Republic 6506
 - control, apple pests 7392
- Aechmea spp.**
- diseases, *Fusarium oxysporum* 4673
 - flower, bud initiation, growth substances, NAA 1372
 - fungicides
 - application
 - methods compared
 - benomyl 4673
 - NF-35 4673
 - injury
 - application methods, benomyl 4673
 - prevention, Ceresan 4673
 - growth substances, flower bud, initiation, NAA 1372
- Aechmea spp.**, trichome, anatomy, morphology 6199
- Aegeria myopaeformis**
- apple pests 4215
 - biological control, apple pests 3409
 - control, apple pests 7393
- Aeneolamia postica**, Mexico, sugar cane pests 6440
- A. varia saccharina**
- aerial spraying, sugar cane pests 8235
 - control, sugar cane pests 4891
 - insecticides, resistance, sugar cane pests 8235, 9254
- Aerial**
- photography
 - disease detection, cucumber and gherkin, annual report, USA 600
 - disease survey, *Xanthomonas phaseoli* 179
 - nutrient toxicity, grapefruit, annual report, USA 790
 - tree, height, estimation, apple 4174
 - vegetation sampling, equipment 4125
 - spraying
 - acaricides
 - Panonychus citri*, orange 8079
 - various, apple 7372
 - bactericides, *Pseudomonas lachrymans*, cucumber and gherkin diseases 1195
 - fungicides
 - Alternaria cucumerina*, cucumber and gherkin diseases 1195
 - cherry 8438
 - Colletotrichum coffeanum*, coffee 3206
 - C. spp., tomato 2876
 - Hemileia* spp., coffee 3206
 - Venturia inaequalis*, apple 7372
 - general
 - deposits
 - pear, annual report, UK 903
 - tea 4111
 - helicopters 4934
 - herbicides, sugar cane, annual report, USA 9221
 - insecticides
 - Aeneolamia varia saccharina*, sugar cane 8235
 - Ceratitis capitata*, coffee 5623
 - cherry 8438
 - Cydia pomonella*, apple 7372
 - Diatraea* spp., sugar cane 8235
 - Longiunguis sacchari*, sugar cane 8235
 - Pyrilla* spp., sugar cane 4893
 - Sipha flava*, sugar cane 8235
 - Tyoea erytrae*, orange 4805

- Aeschynanthus** spp.
flowering
light, intensity 7951
photoperiodism 7951
temperature 7951
growing, in pots, annual report,
Netherlands 6127
growth studies 7951
light, intensity, flowering 7951
photoperiodism, flowering 7951
temperature, flowering 7951
- Aesculus** spp.
flower, extracts, taxonomic studies 8957
nut, extracts, tissue culture media 6206
taxonomy, chemotaxonomy 8957
- Africa**, date, growing, book 9109
- Afromelanichneumon sporadicus**, parasite of,
Ascotis selenaria, coffee pests 1584
- Agapanthus** spp.
glycosides 4666
sterols 4666
- Agaricus** (see also Mushroom)
- A. arvensis**, edible fungi 6958
- A. augustus**, edible fungi 6958
- A. bisporus**
annual report, Netherlands 6120
diseases, *Pseudomonas tolaasii* 4600
edible fungi 703, 6122
- A. bitorquis**
annual report, Netherlands 6120
edible fungi 698, 703, 6958
- A. edulis**, edible fungi 6958
- A. spp.**, genetics 3825
- Agathosma** spp.
drying 2324
essential oil 2324
harvesting, time of 2324
seed
germination 2324
seed maturity 6234
- Ageratum**
dwarfing, growth substances 5390
seedling
production, temperature 276
raising, pots, types compared 5390
weed control 2171
as weeds, oil palm 1601
- Ageratum conyzoides**, essential oil,
composition 9018
- Ageratum** diseases, tomato spotted wilt
4635
- Ageratum** growth substances
dwarfing, Pydanon 5390
retardants, Pydanon 2163
- Ageratum** spp.
as weeds
sugar cane 9236
tea 9272
- Agistemus fleschneri**
population studies, fungicides, apple
5737
predator on, *Panonychus ulmi*, apple
4213
- Agistemus** spp., predator on, *Eutetranychus*
orientalis, citrus 1488-1489
- Aglaonema** spp.
diseases
dasheen mosaic 2975
Erwinia carotovora 3915
- Agricultural**, statistics, USA 899
- Agricultural crops**, bibliography 6477-6478
- Agrilus** spp., rose pests 7084
- Agriotes** spp., seed, treatment, watermelon
pests 2002
- Agrobacterium radiobacter**
biological control 443
var. *tumefaciens*, biological control, peach
diseases 2642
- A. rhizogenes**
fruit trees and plants, diseases 7318
nursery stock, diseases 7318
- A. tumefaciens**
apple diseases 4206
blackberry diseases, annual report, UK
7489
cherry diseases, annual report, UK 8318
fruit trees and plants, diseases 7318
host-pathogen relationships, grapevine
diseases 5856-5857
incidence, Brazil, *Sechium edule*, diseases
8652
loganberry diseases, annual report, UK
7489
- Agrobacterium tumefaciens** contd.
-nematode complex, almond diseases
3367
nursery stock, diseases 7318
rootstock resistance, almond diseases
4168
rootstock treatment, pre-planting, pear
diseases 4207
varietal resistance, grapevine diseases
5857, 8557
- Agromyza** spp., control, chive pests 8746
- Agropyron repens**
as weeds
blueberry 8497
mustard, annual report, German
Federal Republic 7964
rhubarb, annual report, UK 5885
strawberry 2697
- A. spp.**
as weeds
grapevine 5840
lawns and sports turf 5443
- Agrostis** spp.
lawns 2967
lawns and sports turf, variety trials 7021,
7918
nitrogen, content, leaf, nutrient source
3893
nutrition
nitrogen, sources, compared 3893
potassium
calcium, content 3893
magnesium, content 3893
manganese, content 3893
nitrogen, content 3893
sodium, content 3893
sources, compared 3893
phosphorus, content, leaf, nutrient source
3893
roadsides, establishment 3888
root, development, turf 302
- A. tenuis**
lawns and sports turf
car parks 7919
mowing, population studies 8916
nitrogen nutrition, population studies
8916
- Agrotis segetum**
hop pests, annual report, German Federal
Republic 340
Solanum laciniatum, pests 5536
- A. spp.**
lettuce pests 1971
annual report, German Federal
Republic 7597
radish pests, annual report, German
Federal Republic 8579
- Agulla xanthostigma**, biological control of,
Aegeria myopaeformis 3409
- Ailanthus** spp., ringing, bridge development
3008
- Air-layering**
cola, annual report, Nigeria 4035
mango 3227
media, mango 3218
nematode survival, litchi 6373
peony propagation 4613
root initiation, biochemistry, mango
3226
rose propagation 5470
stone fruits 1015
time of, avocado 8054
treatment
growth substances
cashew 6396
guava 8160
mango 3226-3227
- Air pollution** (see also Fluorine; Sulphur
dioxide)
injury 878
acidic fumes, mango 1592, 4064
bean (*Phaseolus*) 3698
dust, ornamental plants 6132
exhaust gases, endive 865
fruit trees and plants, vegetables 3306
nitrogen oxides 4130
oxidants, ornamental plants 6132
ozone 2015
peroxyacetyl nitrate 4130
bean (*Phaseolus*) 2925
chrysanthemum 2925
prevention
fungicides, bean (*Phaseolus*) 3698
- Air pollution** contd.
injury contd.
prevention contd.
mango 1592, 4064
sprays, ornamental plants 6132
- lead**
cabbage, annual report, German Federal
Republic 7599
content
fruit, grapevine 5837
roadside plants, trees and shrubs
440
photochemical oxidants
fruit trees and plants 3306
vegetables 3306
plant resistance, smoky atmosphere, trees
and shrubs 2274
plant responses 3
dusts containing heavy metals 865
fruit trees and plants, vegetables 3306
lead 865
annual report, German Federal
Republic 6481
nitrogen dioxide, greenhouse crops
7296
olefines, greenhouse crops 7296
survey, USA 1680
zinc, annual report, German Federal
Republic 6481
resistance, leaf, pigments, berberis 2998
stomatal movements, sulphur dioxide,
bean (*Vicia*) 2039
studies, equipment, ornamental trees and
shrubs 7845
testing, bedding plants 1322
types 878
- Ajuga** spp., herbicides, injury 1323
- Albizzia** spp.
cold
resistance
nucleic acid content 1398
plant anatomy 3927
proteins, content 1398
- leaf**
movements
light 5265
potassium 5265
nyctinasty 6235
- light**
blue, leaf, movements 5265
red, leaf, movements 5265
pests, *Meloidogyne incognita* 751
phytochrome, leaf, movements 5265
plant, composition 4145
propagation, cuttings, root, nematode
control 751
proteins, content, cold resistance 1398
seedling
composition
nucleic acids, cold, resistance 1398
protein, cold, resistance 1398
- Alcohols**, fruit, disorders, apple, annual
report, USA 3348
- Aleurocanthus woglumi**, citrus pests, annual
report, USA 791
- Aleyrodes sizoukinensis**, *Phyllanthus acidus*
pests 2481
- Algae**
control
pot plants 8846
sand beds for pot plants 8847
fertilizers, enzyme activity, tomato 6098
irradiation, gamma rays, injury, reduction,
tomato 6097
medicinal properties, survey 775
soilless culture, nutrient solution,
strawberry 2701
- Algeria, Urginea maritima**, growing 7116
- Alkaloids**
applied
lettuce 4754
pea 4754
biosynthesis, *Solanum dulcamara* 7114
content
irrigation, *Solanum dulcamara* 8040
monthly variations, *Mitragna* spp.
5526
nitrogen nutrition, poppy 7112
phosphorus nutrition, poppy 7112
ultra-violet light
Atropa spp. 6288
Datura spp. 6288
determination, poppy 5528

Subject Index

Alkaloids *contd.*

- metabolism, poppy 6307
- plant sources 9015
 - India 7065
 - survey 2344
- production
 - tissue culture
 - Atropa belladonna* 6287
 - Catharanthus roseus* 7102
 - fenugreek 4778
 - Rauwolfia* spp. 5531

Allium spp.

- classification 4521
- colchicine treatment, cell development 2087
- diseases, *Pseudomonas syringae* 2083
- growth substances, cell development 2087
- stem, anatomy 4520
- tuliposides 8908
- as weeds, grapevine 1903, 5840

Allochrusa gypsophiloides, saponins 3967**Almond**

- amino acids, content, leaf 5773
- annual report, Tunisia 4944
- breeding and selection, pest resistance, *Meloidogyne javanica* 4166
- carbohydrates, metabolism, leaf 5773
- classification, Afghanistan 4165
- fatty acids, seed 8424
- flowering, date, irrigation 2535
- frost, resistance, varieties, USSR 2533
- fungicides, translocation, oxycarboxin, growth substances 5707
- growing
 - Bulgaria, book 3363
 - economics 3364
 - Italy 3364-3365
 - review 8332
- harvesting, mechanical, shakers 4169
- hybrids 4165
- irrigation
 - flowering, date 2535
 - plant nutrition 2534
- irrigation recommendations 4167
- pollen, germination, morphology 8330
- pollination 2536
- production and trade, Italy 3364-3365
- proteins
 - biosynthesis 5773
 - extraction, seed 3368
- as a rootstock for, peach 3468
- seedling, growth, inhibition, growth substances 5708
- sterols
 - choline, content 4954
 - seed 8424
- vitamin E, seed 8424
- weed control 452
- winter hardiness, varietal differences 2533

Almond bud, initiation 2535**Almond diseases**

- Agrobacterium tumefaciens*
 - nematode complex 3367
 - rootstock resistance 4168
- Fusicladium carpophilum*, control 7328
- Verticillium dahliae* 7329

Almond disorders, apoplexy, fungus relationships, *Phytophthora* spp. 454**Almond flower**

- bud development
 - irrigation 2535
 - temperature 2535
- bud initiation
 - soil moisture 2535
 - temperature 2535
- nectar
 - composition, varietal differences 8334
 - production, varietal differences 8334

Almond growth substances

- fungicides, translocation, aminozide, chlormequat 5707
- responses, chlormequat, review 8310
- root
 - formation
 - IBA 5708
 - NAA 5708
 - seedling
 - growth
 - inhibition
 - IBA 5708
 - NAA 5708

Almond nut, proteins, content 4941**Almond nutrition**

- manganese, application, foliar 8333
- nitrogen, irrigation 2534
- phosphorus
 - application, foliar 8333
 - irrigation 2534
- potassium, application, foliar 8333
- zinc, application, foliar 8333

Almond pests

- Brachycaudus helichrysi* 459
- Meloidogyne javanica*, disease relationships 3367
- mites, biological control 29
- Paramyelois transitella*
 - biological control 4955
 - control, cultural methods 33
- Pterochloroides persicae* 459

Almond propagation 26

- air-layering 1015
- cuttings, root, treatment, growth substances, IBA 8323

Almond root, formation, growth substances 5708**Almond rootstocks**

- bitter almond 4168
- disease resistance, *Agrobacterium tumefaciens* 4168
- sweet almond 4168

Almond seed, proteins, extraction 3368**Almond varieties** 3366

- Bulgaria 919
- comparative trials, annual report, Cyprus 3345
- flower
 - nectar composition 8334
 - nectar production 8334
- frost resistance 2533
- Markovo II 458
- pollination 2536
- register, USA 4156
- Tunisia 4155
- winter hardiness 2533

Aloe spp., chromones 3065**Alopecurus pratensis**, lawns and sports turf, breeding and selection, disease resistance 6195**Aloysia triphylla**, essential oil 8991**Alpine plants**, annual report, Austria 265**Alpinia officinarum**, essential oil, composition 7965**A. officinarum**, flavonoids 5486**Alstonia boonei**

- alkaloids 3066
- content 1427
- terpenes, content 2351

A. spp., alkaloids, content 1436**Alstroemeria**

annual report, Netherlands 6126

flowering

- light
 - intensity 7875
 - supplementary 7875
- photoperiodism 6990, 7875
- temperature 6990

light

- intensity, flowering 7875
- supplementary, flowering 7875
- photoperiodism, flowering 6990, 7875
- temperature
 - flower bud, initiation 6990
 - flowering 6990

Alstroemeria flower, bud initiation,

temperature 6990

Alstroemeria spp., tuliposides 8908**Alternanthera pungens**

- anatomy 4755
- morphology 4755

Alternaria alternata

- jasmine diseases 336
- post-harvest dips
 - apple diseases 5007
 - pear diseases 5007

A. brassicae

- control, cultural methods, melon (cantaloup and musk) diseases 2770
- melon (cantaloup and musk) diseases 2770
- varietal resistance
 - brussels sprouts diseases 4420
 - cabbage diseases 4420
 - melon (cantaloup and musk) diseases 2770

Alternaria *contd.***A. brassicicola**

- brassicas, diseases, annual report, UK 1934
- cauliflower and broccoli diseases 1170

A. citri, fruit storage, citrus diseases 5574**A. cucumerina**, aerial spraying, cucumber and gherkin diseases 1195**A. dauci**

- carrot diseases, annual report, USA 8585
- incidence, Nigeria, carrot diseases 5371

A. fici, fig diseases 8450**A. kikuchiana**

- host enzyme activity, pear diseases 7458
- host phenolic compounds, pear diseases 6645

resistance

- breeding and selection, pear diseases 6642
- pear diseases 7458
- varietal resistance, pear diseases 6645

A. mali, apple diseases 7379**A. musae**, banana diseases 4833**A. passiflorae**, passion fruit diseases, annual report, Australia 4782**A. porri**

- carrot diseases 693
- leek diseases 661
- onion diseases, annual report, Netherlands 6772

A. radicina, carrot diseases 2139**A. solani**, -nematode complex, tomato diseases 2877**A. spp.**

- apple diseases 1753
- carrot diseases
 - annual report
 - German Federal Republic 8579
 - USA 4367
- cherry diseases 5022
- control, bean (*Phaseolus*) diseases 8690
- epiphyte, pecan 2653
- gerbera diseases 2200
- incidence, Nigeria, vegetables 5166
- varietal resistance, tomato diseases 4553, 6055

A. tenuis, fruit storage, fig diseases 1010**A. tenuissima**

- aster, china, diseases 6993
- fungal parasites, *Puccinia palargonii-zonalis*, geranium 6982

Althaea spp., hybrids, mucilage, content 7098**Altitudes**

- fruit, quality, mandarin and tangerine 3107
- plant, growth, *Vaccinium* spp. 4318
- rhododendron 2985
- trees and shrubs, suitability 2274

Aluminium

- calcium absorption, apple 5730
- content, nitrogen nutrition, tea 6457
- determination, rubber 7227
- magnesium absorption, apple 5730
- phosphorus absorption, sugar cane 7252
- potassium absorption, apple 5730
- toxicity
 - apple 5730
 - enzyme activity, pea 8721
 - grapevine nutrition 576
 - nitrogen nutrition, pea 7728
 - phosphorus nutrition, pea 7728
 - plant tolerance
 - bean (*Phaseolus*) nutrition 5974
 - pea 6864
 - sugar cane 409
 - varietal resistance, pea 8721
 - varietal responses, bean (*Phaseolus*) 5974

Alyssum seed

- sowing
 - direct, in pots, pelleted 2165
 - peat 7606
- treatment, pelleted 2165

Amaranthus, growing, as a vegetable 7823**Amaranthus retroflexus**, as weeds, container-grown plants, holly 4693**A. spp.**

- growing, vegetable crop 6119
- leaf
 - composition
 - protein 6119
 - vitamins 6119
 - nutritional value 4388

- Amaranthus spp.** *contd.*
phytochrome, degradation, light, coloured 3736
vegetable, seed, sowing, dates 697
as weeds
artichoke, globe 3633
asparagus 2827
bean (*Phaseolus*) 2017, 6842
citrus 6339
cucurbits 623, 6812
peach 4252
vegetables 680
- Amaryllidaceae**, ornamental species, Denmark 3863
- Amaryllis**, enzyme activity, flower 3851
- Amaryllis diseases**
fungus, unidentified 4667
Hippeastrum-mosaic, vectors, annual report, Netherlands 6961
- Amaryllis spp.**, growing, as an intercrop, *Streptocarpus* spp. 8879
- Amblypelta theobromae**, cacao pests 2444
- Amblyseius cucumeris**, predator on, *Eutetranychus orientalis*, citrus 1488
- A. hibisci**
predator on
Brevipalpus californicus, citrus 1489
Eutetranychus orientalis, citrus 1488
- A. spp.**, predator on, *Eutetranychus orientalis*, citrus 1489
- Amelanchier spp.**
fluorine, toxicity, plant tolerance 7845
sulphur dioxide, injury, plant resistance 7845
- American tropics**
Solanaceae
fruit species 9123
growing 9123
- Amides**
biosynthesis, translocation, root, plant nutrition, grapevine 5868
content, leaf, *Deuterophoma tracheiphila*, lemon 8061
- Amino acids**
absorption, cucumber and gherkin 6831
applied
coffee 4060
enzyme activity, pea 7732
virus, control 888
biosynthesis
apple 967
fruit, grapevine 7587
irradiation, gamma rays, kohlrabi 5931
leaf, grapevine 7587
pea 7739
photoperiodism, coloured light, *Salvia sclarea* 7085
translocation, root, plant nutrition, grapevine 5868
- content**
bud, biennial bearing, apple 5742
bulb, shallot 6035
chlorosis, grapevine 6750
dormancy, cabbage 8632
fruit 8667
Citrus spp. 7157
drought, mandarin and tangerine 8093
mandarin and tangerine 8086
natsudaikai, orange, grapefruit, mandarin and tangerine 7157
olive 9115
phosphorus nutrition, potassium nutrition, capsicum 6039
ripening, banana 5607
herbicides, bean (*Phaseolus*) 5995
iron, tissue culture, carrot 1307
irrigation, *Solanum dulcamara* 8040
leaf
almond 5773
Deuterophoma tracheiphila, lemon 8061
mandarin and tangerine 8086
peach 5773
phosphorus nutrition, potassium nutrition, capsicum 6039
plant, tea 4662
review 4941
root, cobalt nutrition, tomato 8772
seed
bean (*Phaseolus*) 8704
development, cabbage, chinese 8633
- Amino acids contd.**
content contd.
seed *contd.*
mutants, pea 8732
sulphur dioxide, pea 6015
degradation, *Phoma destructiva*, tomato 4573
determination, paper chromatography, tomato 8807
disease incidence, capsicum 2846
metabolism
apple 8401
cauliflower and broccoli 5936
coffee 4060
fruit
citron 8095
maturation, citron 8094
ripening, tomato 8800
growth substances, radish 6803
leaf, bean (*Phaseolus*) 5996
mycorrhiza, hazel 7435
pea 5261
- Ammi majus**
coumarins 4756
glycosides 8006
- A. spp.**
coumarins, content, estimation, spectrophotometric 7099
diseases, virus, incidence, German Federal Republic 6781
fruit
coumarins, content, temperature 782
maturity, coumarins, content 4756
growth substances, responses, GA 9019
nucleic acids 4590
nutrition, NPK, coumarins, content 782
seed
carbohydrates, content growth substances 9019
chromones, content growth substances 9019
oil, content growth substances 9019
temperature, fruit, coumarins, content 782
tissue culture, polyembryony induction 1447
- Ammonium**, toxicity, soil, steaming, frequency 1325
- Amorphophallus campanulatus**, stem, anatomy 6949
- Amphimallon majalis**, lawns and sports turf, pests 7930
- Amphorophora agathonica**, varietal resistance, raspberry pests 1863
- A. rubi**
blackberry pests 5079
virus, vectors, *Rubus* viruses, raspberry 4317
- Amsonia elliptica**, plant, composition 9031
- A. tabernaemontana**
alkaloids 6284
flavones, determination 8007
glycosides, determination 8007
- Amygdalus spp.**, classification 4165
- Anabaena cylindrica**, alga, soilless culture, nutrient solution, strawberry 2701
- Anacardiaceae**
fruit species, American tropics 9124
growing, American tropics 9124
nomenclature 9124
value 9124
- Anagallis spp.**, as weeds, artichoke, globe 3633
- Anagrus epos**, parasite of, *Erythroneura zizac*, grapevine 5861
- Anagrus saccharicola** parasite of, *Saccharicoccus sacchari*, sugar cane 8242
- Anarsia lineatella**, apricot pests 63
- Anastrepha fraterculus**, peach pests 8459
- A. suspensa**, peach pests, annual report, USA 4945
- Anemone**
annual report, UK 3832, 3834
forcing 6165
herbicides, responses 8852
weed control 8852
- Anemone diseases**, *Peronospora anemones* 2221
- Anemone propagation**, cuttings, root 4613
- Anemone soil**, fumigation, *Peronospora anemones* 2221
- Anethum sowa**
essential oil
composition 4757-4758
fungicidal properties 6256
- A. spp.**, seed, composition 346
- Angelica gigas**
composition 784
medicinal properties 784
- A. silvestris**, coumarins 6283
- Angelica spp.**
coumarins, content 1446, 5519
glycosides, content 785
harvesting, time of, medicinal use 3067
medicinal properties 785
plant composition 3067
taxonomy, coumarins, content 5519
- Aniba roseodora**, flavonoids 6245
- Anisandrus dispar**, apricot pests 63
- Annona muricata**
growing
Hawaii 3175
Venezuela 1533, 8119
- A. spp.**
fruit, irradiation, gamma rays, post-harvest, storage life 2435
growing, USA 1531
- A. squamosa**
fruit, aroma 7171
seed oil, insecticidal properties 1534
- Annual report**
Australia
Brisbane
Bureau of Sugar Experiment Stations 9219
Queensland Department of Primary Industries 7596, 8313, 9068, 9121
Sandy Trout Food Preservation Research Laboratory 755, 901, 1134, 1460, 1529
Griffith, CSIRO Division of Irrigation Research 550, 1133, 1466, 6480, 6523, 6769, 9074
New South Wales, Department of Agriculture 4296, 4782, 5385, 5600, 5693, 5882
Victoria, Tatura Horticultural Research Station 450
- Austria, Wien-Schönbrunn, Höhere Bundeslehr- und Versuchsanstalt für Gartenbau 114, 265, 347
- Belgium
Brussels
Institut pour L'Encouragement de la Recherche Scientifique dans L'Industrie et L'Agriculture 1131, 5071
Institut pour L'Encouragement de la Recherche Scientifique dans L'Industrie et L'Agriculture 4942, 5386
- Gembloux
Centre de Recherches Agronomiques de L'État 2517, 4363
Centre de Recherches Agronomiques de L'État 6691
Comité National pour l'Étude de la culture Fruitière 902
- Gent, Government Agricultural Research Centre 4925, 5906, 6272, 8835
- La Hulpe, Station Provinciale de Recherches Scientifiques Agricoles et Viticoles 3559
- Noorderkempen, Proefbedrijf der Noorderkempen 1060, 5148, 8578
- Rillaar, Tuinbouwstichting Hageland-Zuiderkempen, Rillaar 4297, 6503
- Burundi, Bujumbura, Institut des Sciences Agronomiques 4031-4032, 4786
- Canada
British Columbia Department of Agriculture 6667
Kentville, Nova Scotia Fruit Growers' Association 5694-5696
Ottawa, Department of Agriculture, Research Branch 2515, 2669, 2734, 2910
- Quebec
Conseil des Recherches Agricoles, Québec 4170, 5883, 6668

Annual report *contd.*

- Canada *contd.*
 Quebec *contd.*
 Ministère de l'Agriculture et de la Colonisation, Québec 538, 1719, 1944, 2154
 Toronto, Agricultural Research Institute of Ontario 7488, 8314, 8836
 Victoria, British Columbia Department of Agriculture 3370, 3603, 3882
 Cyprus, Nicosia, Agricultural Research Institute 3345, 3560, 3604, 3980
 Czechoslovakia, Prague-Ruzyně, Research Institutes for Crop Production 6713
 Denmark
 Copenhagen, Almindelig dansk Gartnerforening 3298
 Lyngby, Statens Plantepatologiske Forsøg, Lyngby 4136
 East Africa
 East African Agriculture and Forestry Research Organization 8188
 Nairobi, Industrial Research Organization 4855
 East African Community, Tropical Pesticides Research Institute 5245, 5617
 France
 Institut de Recherches Agronomiques Tropicales et des Cultures Vivrières 754, 3605, 5647
 Paris
 Institut de Recherches sur la Caoutchouc en Afrique 9205
 Institut de Recherches sur le Caoutchouc en Afrique 3250
 German Federal Republic
 Berlin and Braunschweig, Biologische Bundesanstalt für Land- und Forstwirtschaft in Berlin und Braunschweig 7063, 7599, 8837
 Berlin and Braunschweig, Biologische Bundesanstalt für Land- und Forstwirtschaft in Berlin und Braunschweig 4298, 6504
 Braunschweig, Deutscher Pflanzenschutzdienst 6506, 6669, 7064, 8579
 Geisenheim, Hessische Forschungsanstalt für Wein-, Obst- und Gartenbau 8315
 Hamburg, Institut für Angewandte Botanik der Universität Hamburg 5094, 6481, 6505, 6959, 7070, 7597
 Hüll, Hans-Pfuhl-Instituts für Hopfenforschung 340, 7087
 Mainz, Landespflanzenschutzdienst Rheinland-Pfalz 7309, 7598, 7843, 7964, 8481
 Munich, Fachhochschule Weihenstephan 7310, 7600, 7844
 German Federal Republic, Weinsberg, Staatliche Lehr- und Versuchsanstalt für Wein und Obstbau, Weinsberg 4943
 German Federal Republic, Weinsberg, Staatliche Lehr- und Versuchsanstalt für Wein und Obstbau, Weinsberg 5072
 Ghana, Tafo, Cocoa Research Institute 7177
 Guyana, Sugar Experiment Station 9220
 India
 Coimbatore, UPASI Tea Scientific Department 1657
 New Delhi, Institute of Horticultural Research, Hesaraghatta, Bangalore 2668
 New Delhi, Institute of Horticultural Research, Hesaraghatta, Bangalore 2667, 3606-3607, 3971, 4024, 4033-4034
 Irish Republic
 Dublin
 The Agricultural Institute 1720, 1857, 1939, 2909, 3957, 6482, 6770, 7032, 8035
 University College, Faculty of General Agriculture 2538, 5150
 Israel, Jerusalem, Ministry of Agriculture, Center for International Agricultural Cooperation 3608

Annual report *contd.*

- Italy, Pisa, Università di Pisa, Facoltà di Agraria 6507, 6714, 6771, 6960, 8050
 Jamaica, Coconut Industry Board 4851
 Kenya
 Kericho, Tea Research Institute of East Africa 7264
 Nairobi
 Coffee Research Foundation 3191
 East African Agriculture and Forestry Research Organization 6844
 Malawi, Zomba, Department of Agriculture 8580, 9119
 Netherlands
 Aalsmeer, Proefstation voor de Bloemisterij in Nederland te Aalsmeer 6126-6127
 Boskoop, Proefstation voor de Boomkwekerij te Boskoop 2516, 4604
 Consulentenschap voor Champignonenteelt; Stichting Proefstation voor de Champignoncultuur; Centrum voor Champignonenteeltonderwijs; Laboratorium Domesticatie Paddestoelen 6120
 Haren-Groningen, Instituut voor Bodemvruchtbaarheid 4956, 5095, 5151, 6962
 Lisse, Laboratorium voor Bloembollenonderzoek 2219
 Naaldwijk
 Proefstation voor de Groenten- en Fruitteelt onder glas te Naaldwijk 704
 Proefstation Voor de Groenten- en Fruitteelt onder glas te Naaldwijk 1068
 Proefstation voor de Groenten- en Fruitteelt onder glas te Naaldwijk 1135
 Wageningen
 Instituut voor Plantenziektenkundig Onderzoek 5073, 5698, 6772, 6961
 Instituut voor Tuinbouwtechniek 5, 23, 100, 1132, 1314, 7285, 8581
 Wilhelminadorp, Proefstation voor de Fruitteelt 5697, 6670
 New Zealand, Levin, Horticultural Research Centre 4171, 5074, 5152, 5391
 Nigeria
 Benin City, Institute for Oil Palm Research 9181
 Cocoa Research Institute 4035
 Philippines, Sugar Institute 8189
 Rhodesia, Salisbury, Secretary for Agriculture 4149, 4364, 4829
 Sabah, Department of Agriculture 8582, 9075, 9135
 Sarawak, Department of Agriculture, Research Branch 3609, 3933, 4036
 South Africa
 Durban, South African Sugar Experiment Station 7229
 Mount Edgecombe, South African Sugar Association Experiment Station 7230
 Sri Lanka
 Coconut Research Institute 7185
 Peradeniya, Director of Agriculture 3171
 Talawakele, Tea Research Institute 8262
 St. Lucia, Ministry of Agriculture, Research Division 8056, 8577
 Sweden, Kristianstad, Lantbrukshögskolan, Avdelningen för Växtförädling av Frukt och Bär, Balsgård 5075, 6508
 Trinidad and Tobago, St. Augustine, University of the West Indies 9136
 Tunisia
 Institut National de la Recherche Agronomique, Laboratoire d'Arboriculture Fruitière 3981, 4944
 Institut National de la Recherche Agronomique, Laboratoire de Viticulture 3561

Annual report *contd.*

- UK
 Aberdeen
 Macaulay Institute for Soil Research 8584
 North of Scotland College of Agriculture 1855, 1936, 2153
 Ashford, Wye College Department of Hop Research 3954
 Belfast, Ministry of Agriculture for Northern Ireland 4172, 4606, 5076, 5154
 Boston, Kirtan Experimental Horticulture Station 598, 732-733, 1872, 3538, 3610, 7907
 Bristol
 Agricultural Development and Advisory Service, South Western Region 3372
 Long Ashton Research Station 903, 1856, 1938, 2155, 2330, 2380, 2449
 Camborne, Rosewarne Experimental Horticulture Station 3834, 4366, 5096
 Cambridge, National Institute of Agricultural Botany 5149
 Dundee, Scottish Horticultural Research Institute 3514, 3874, 4365
 Edinburgh
 Department of Agriculture and Fisheries for Scotland 2485
 School of Agriculture 3552, 3614, 3871
 Ely, Arthur Rickwood Experimental Husbandry Farm 601
 Harpenden, Rothamsted Experimental Station 5153
 Hereford, Rosemaund Experimental Husbandry Farm 2537, 3040
 Hoddesdon, Lee Valley Experimental Horticulture Station 6774
 London, Forestry Commission 6483
 Lymington, Efford Experimental Horticulture Station 3373, 3533, 4605, 5884
 Maidstone, East Malling Research Station 7489, 8139, 8317-8318, 9009
 Norwich, John Innes Institute 3346, 3535, 3612, 3832
 Peterborough, Pea Growing Research Organisation Ltd. 3611
 Preston, Fairfield Experimental Horticulture Station 4622, 6773
 Selby, Stockbridge House Experimental Horticulture Station 529, 1937
 Shardlow, National Agricultural Advisory Service, East Midland Region 867
 Silsoe, National Institute of Agricultural Engineering 2487, 2672, 2743, 5752
 Stratford-on-Avon, Luddington Experimental Horticulture Station 3371, 3515, 3613, 3833
 Wantage
 Letcombe Laboratory 3521
 Letcombe laboratory 5943
 Wellesbourne, National Vegetable Research Station 1934
 Wolverhampton
 Agricultural Development and Advisory Service, West Midland Region 3347, 3534, 4742, 5885, 6128, 8316
 Agricultural Development and Advisory service, West Midland Region 8583
 Agricultural Development and Advisory Service, West Midland Region 8838
 USA
 Carbondale, Northern Nut Growers Association Inc. 25
 East Lansing
 Michigan State University
 Agricultural Experiment Station 7490, 7601, 8319, 8839
 Michigan State University, Department of Horticulture 3348, 3516, 3616, 3835

- Annual report contd.**
USA contd.
 Fort Collins, Colorado State University 3300, 3357, 3617
 Gainesville, Institute of Food and Agricultural Sciences, Florida University 437, 1440-1441, 1530, 2375, 4367-4368, 4945, 5078, 6129, 6383, 6692, 8051, 8585, 8834
 Honolulu, Hawaiian Sugar Planters' Association Experiment Station 9221
 Mississippi, Agricultural and Forestry Experiment Station 1706, 1935, 2152, 2433
 New Mexico, State University, Agricultural Experiment Station 3349, 3618, 3836
 Washington, State University 24, 324, 1130, 5077
 Weslaco, Spectral Survey of Irrigated Region Crops and Soils 599-600, 790-791
 Venezuela, Cacuagua, Estación Experimental de Cacao 6391
 West Indies, Central Sugar Cane Breeding Station and the Barbados Sugar Cane Variety Testing Station 4080
 Western Samoa, Alafua, Department of Agriculture, Forests and Fisheries 7602, 8122
 Yugoslavia, Ljubljana, Kmetijski Inštitut Slovenije 3350, 3517, 3619
 Zambia, Lusaka, Department of Agriculture, Research Branch 7284, 8586-8587
- Annual Review**
 entomology 7282
 Phytopathology 3316
 of Plant Physiology 1673
- Annals**
 nutrition, annual report, German Federal Republic 7844
 pests, rabbits, damage 4616
 planting, anti-transpirants 3333
 transpiration, anti-transpirants, leaf senescence 3333
- Anoplophora macularia**, litchi pests 373
- A. spp.**, rootstock resistance, mandarin and tangerine pests 7128
- Antestiopsis lineaticollis**, coffee pests, annual report, Burundi 4031-4032
- A. spp.**, coffee pests 6407
- Anthocleista zambesiaca**, as medicinal plants 9020
- Anthocoris nemoralis**, predator of, *Phorodon humuli*, hop, annual report, UK 3954
- A. nemorum**, predator of, *Phorodon humuli*, hop, annual report, UK 3954
- Anthocyanins**
 avocado, annual report, Trinidad and Tobago 9136
 biosynthesis
 ethylene, cabbage 8630
 growth substances, cabbage 8630
 light, cranberry 8498
 red light, cabbage 8630
 temperature, cranberry 8498
 cacao, annual report, Trinidad and Tobago 9136
 content
 flower, static 8877
 leaf, ornamental plants 8944
 legumes 8705
- Antholyza spp.**
 seed
 composition 2943
 oil 2943
- Anthonomus rubi**
 strawberry pests 8517
 annual report, German Federal Republic 8481
- Anthriscus spp.**, ascorbic acid, carotene, content, leaf 4728
- Anthurium**
 annual report, Netherlands 704, 6126
 fertilizers, slow-release 6964
 growing
 peat 8875
 as pot plants 3855
 hybrids 3855
 planting, spacing 8875
- Anthurium contd.**
 potting composts, annual report, Netherlands 6962
 report, USA 6130
 seedling, pricking out, root trimming 6991
 shade
 nutrition 7877
 plant responses 7877
 soilless culture
 media 8875
 nutritional studies 8875
- Anthurium diseases**
 bacterial, unidentified 4636
Colletotrichum gloeosporioides, control 7876
 dasheen mosaic 2975
- Anthurium flower**
 colour 7878
 cut, vase life 6158
 quality 7878
- Anthurium nutrition**
 fertilizers, slow-release 7877
 nitrogen, potassium 2211
 NPK 7877
- Anthurium plant, variation** 7878
- Anthurium spp.**
 flower bud, initiation 1350
 juvenility 1350
 propagation, annual report, Belgium 5386
- Antibiotics**
 actinomycin, injury, bean (*Phaseolus*) 4475
 actinomycin D, enzymes, biosynthesis, tissue culture, artichoke, jerusalem 3630
 fungicides
 polyoxin, gooseberry 2679
 streptomycin, hop 1419
 virus, control 888
- Antirrhinum**
 air pollution, sulphur dioxide, ethylene, injury 6132
 annual report
 Canada 2910
 UK 3832
 USA 8834
 chloroplast, protein, determination 5411
 choline, determination 2933
 flowering, genetics 3852
 genetics 2932
 flowering, date 3852
 growing
 under cloth-shaded structures 8860
 conifer bark humus 7855
 under glass 7855
 peat 7855
 herbicides, responses 8852
 light, intensity, heterosis expression 3853
 ozone, injury 1322
 sulphur dioxide, injury 1322
 tissue culture
 pistil 8873
 pollen 8873
 weed control 2171, 8852
- Antirrhinum diseases**, *Verticillium albo-atrum*, soil, fumigation 2206
- Antirrhinum flower**
 cation exchange capacity 7873
 composition 7874
 colour, shoot breakage 2204
 composition 7873
 glycosides 7872
 pigments 1344
- Antirrhinum growth substances**
 flower stem
 length
 chlormequat 6987
 GA 6987
 flowering, date, GA 6987
 growth reduction, chlormequat 6987
- Antirrhinum nutrition** 1325
 iron
 absorption, leaf 3854
 sources, chelates 3854
 translocation 3854
- Antirrhinum orontium**, plant, morphology 9021
- Antirrhinum plant**, cation exchange capacity, composition 7874
- Antirrhinum shoot**
 breakage
 flower colour 2204
 shoot lignification 2204
- Antirrhinum soil**, fumigation, *Verticillium albo-atrum* 2206
- Antitrogus mussoni**, insecticides, application, methods compared, sugar cane pests 8236
- Ants**
 cacao pests 6394
 citrus pests 4003
- Aonidiella aurantii**
 biological control
 avocado pests 3983
 citrus pests 9096-9097
 annual report, Cyprus 3980
 citrus pests 4003
 annual report, Australia 4782
 oil fruit dips, orange pests 1493
 orange pests 5564
 parasites
Aphytis melinus
 citrus pests 1492, 1494
 orange pests 1495
 population studies
 citrus pests 799
 damage, mandarin and tangerine pests 2396
 resistance
 grapefruit pests 3134
 lemon pests 3134
 mandarin and tangerine pests 3134
 NPK nutrition, orange pests 2397
 orange pests 3134
- Apanteles flavipes**
 parasite of
 borers, sugar cane 9255
Diatraea saccharalis, sugar cane 2469
- Aphaenogaster pythia**, sugar cane pests 1638
- Aphanomyces euteiches**, nematode relationship, pea diseases 211
- A. raphani**
 infection process, cabbage diseases 7654
 radish diseases, annual report, German Federal Republic 8579
- A. spp.**
Echinodorus brevipedicellatus, diseases 2974
 pea diseases 2974
 tolerance, pea diseases 2817
- Aphanostigma piri**, pear pests 7459
- Aphelandra**
 flowering
 date
 light, supplementary 2303
 temperature 2303
 light, supplementary, flowering date 2303
 temperature, flowering date 2303
- Aphelenchoides besseyi**, *Ficus elastica*, pests 2270
- A. blastophthorus**, aster, china, pests 3858
- A. fragariae**
 bacteria complex, strawberry pests 5699
 strawberry pests, annual report, German Federal Republic 4298, 6669
- A. ritzema-bosi**
 aster, china, pests 3858
 strawberry pests 3551
- A. ritzemabosi**
 chrysanthemum pests 3841
 strawberry pests, annual report, German Federal Republic 4298, 6669
- A. spp.**
 mint pests, annual report, UK 4742
 strawberry pests, annual report, German Federal Republic 5094
- Aphelenchus avenae**, disease complex, tomato pests 8782
- Aphids**, apple pests, annual report, UK 8318
- Aphis craccivora**
 vectors
 subterranean clover stunt, yellow mosaic, legumes 6846
 virus
 bean (*Vicia*) pests 6846
 pea pests 6846
- A. fabae**
 bean (*Vicia*) pests 4490

Subject Index

- Aphis fabae** *contd.*
 fertility rate reduction, antibiotics, bean (*Vicia*) pests 8709
 pea pests 4504
 annual report, UK 5153
- A. forbesi**, strawberry pests 5079
- Aphis gossypii**
 biological control, cucumber and gherkin pests 3685, 5956
 control
 cucumber and gherkin pests 5222
Cucumis melo var. *flexuosus*, pests 5222
 disease relationships, banana pests 4833
 resistance, melon (cantaloup and musk) pests 4443
 seed, treatment, squash pests 630
 vectors
 virus
 bean (*Vicia*) pests 6846
 pea pests 6846
 virus vectors, manila hemp pests 2437
- A. grossulariae**, small fruits, pests 5079
- A. idaei**, raspberry pests 5079
- A. pomi**
 annual report, Canada 2515
 apple pests 5738
 control, growth substances, aminozone, apple pests 4214
- A. rubi**, raspberry pests 5079
- A. ruborum**, blackberry pests 5079
- Aphytis africanus**, parasite of, *Aonidiella aurantii*, citrus 9096
- A. holoxanthus**, parasite of, *Comperiella bifasciata*, citrus 1491
- Aphytis melinus**
 parasite of
Aonidiella aurantii
 citrus 1492, 9097
 orange 1495
Aspidiotus hederae, citrus 1492
Chrysomphalus dictospermi, citrus 1492
- Apocynum cannabinum**
 tissue culture
 callus
 media analysis 2345
 tissue analysis 2345
 cell suspension
 media analysis 2345
 tissue analysis 2345
- Apoplexy**
 fungus relationships
 apricot 7423
 stone fruits 454
 review, apricot 8425
- Aporocactus** spp., diseases, virus, annual report, German Federal Republic 8837
- Apple**
 acaricides, residues, fruit, Plictran 1770
 amino acids
 biosynthesis 967
 content 967
 bud, biennial bearing 5742
 proliferation disease 7377
 metabolism 8401
 annual report
 Australia 450, 901, 5693, 6523, 8313
 Belgium 902, 2517, 6503
 Canada 1719, 2515, 3370, 4170, 5694, 8314
 Cyprus 3345
 German Federal Republic 4943, 6504–6506, 7309–7310, 8315
 Irish Republic 1720, 2538
 Netherlands 23, 4956, 5697–5698
 New Zealand 4171
 Rhodesia 4149
 UK 903, 3347, 3371–3373, 4172, 5752, 8316–8318
 USA 24, 3348–3349, 8319
 Yugoslavia 3350
 ascorbic acid, content, fruit, varietal differences 7416
 biennial bearing 4223
 bud, composition 5742
 carbohydrates, metabolism 6584
 fruit, quality 2608
 growth substances, endogenous 5742
 leaf, composition 970–971
 phosphorus
 content 2589
 leaf 2589
- Apple** *contd.*
 biennial bearing *contd.*
 phosphorus *contd.*
 root 2589
 boron, content, leaf 6553
 breeding and selection 461, 1728, 6525–6526
 annual report
 Sweden 6508
 USA 4945
 cold resistance 5699
 disease resistance 44
 disease tolerance, *Podospaera leucotricha* 2539
 dwarf forms 5699
 fruit
 colour 4177
 size 460, 2539
 internode length 923
Malus manshurica 4175
 pest resistance 44
Dysaphis spp. 2539
 USSR 462
 cadmium, determination 4389
 calcium
 content
 fruit
 nitrogen nutrition 4972
 zinc nutrition 2605
 leaf 6553
 nitrogen nutrition 4972
 seasonal variations 6554
 varietal differences 6554
 shoot 5705
 seasonal variations 6554
 varietal differences 6554
 translocation
 crystal formation 4221
 growth substances 961
 transpiration 1775
- carbohydrates**
 content
 light, intensity 1731
 shoot, watercore 8384
 metabolism
 biennial bearing 6584
 frost resistance 6580
 fruiting relationships 6579
 nitrogen nutrition 39
 pruning and training 3399
 seasonal variations 8403
 storage in roots, seasonal variations 8403
 storage in shoots, seasonal variations 8403
- carbon dioxide**, uptake, seasonal variations 4992
- cell wall**, composition, fruit 6603
- chlorophyll**
 content
 iron nutrition 6563
 leaf
 diseased plants, proliferation 7377
 potassium nutrition 5723
 thickness 4991
 seasonal variations 4991
 degradation, leaf, senescence 7400
- chloroplast**
 number, light 8337
 size, light 8337
 climate, yield correlations 8349
- cold**
 injury 6533
 protection, forest belts 4186
 resistance
 grafting height 4180
 plant nutrition 4180
 plant vigour 5727
- copper**
 content
 leaf
 seasonal variations 6554
 varietal differences 6554
 shoot
 seasonal variations 6554
 varietal differences 6554
- cover crops**
 grass sward 5699, 5718
 plant nutrition 8375
 soil, micro-organisms 2559
 management, root growth 934
- defoliation**
 chemical 5716, 6510–6511
- Apple** *contd.*
 defoliation *contd.*
 growth substances 6511
 potassium iodide, magnesium chlorate, calcium cyanide 6512
- dormancy**
 breaking
 DNOC 4973
 temperature 907
 growth substances, endogenous 6575
 induction, growth substances 4220
 water relations 6521
 winter hardiness 6521
- drought** 8285
 leaf scorch 4979
 photosynthesis 908
 plant
 cell numbers 908
 composition 908
 resistance
 plant nutrition 4962
 rootstock–scion relationships 8354
 rootstocks 5741
 soil moisture 4962
 respiration 908
- economics**
 climate–yield correlations 8349
 EEC 3341
 high density planting 464, 7331
 insecticides, application, Italy 4153
 Irish Republic 8336
 orchard depreciation 3352
 UK 3341
- electrical resistance**, disease incidence, proliferation 7376
- enzyme activity**
 bark
 nitrogen nutrition 7398
 seasonal variations 7398
 diseased plants 8402
- fruit**
 development 4993
 disorders, internal browning 7412
 storage 6592, 7412
 grafted plants 8402
 inhibition, fungicides 6578
- leaf**
 nitrogen nutrition 7398
 seasonal variations 7398
- plant**, senescence 8402
- root**
 nitrogen nutrition 7398
 seasonal variations 7398
 seasonal variations 50
- enzymes**, fruit, disease resistance 5736
- epiphytes**, fungi, *Graphium* spp. 955
- ethylene**
 biosynthesis 6591
 protein metabolism 2590
 production
 fruit, growth substances, chlormequat 1786
 stressed branches 911
- flowering**
 date
 forecasting 4961
 temperature 2592
 temperature 4999
 defoliation 4197
 growth substances
 morphactins 5743
 NAD 3424
 phosphorus nutrition 7368
 rootstock–scion relationships 7312
 temperature sums 4961
- frost**
 injury
 bark 2556
 bud development 1709
 fruit 964
 measurement 6539
 pruning and training, time of 8362
 root 2554
 shoot
 cell water relations 7397
 mechanism 7353
 stem 2587
 trunk 8351
- protection**
 plastic films 3358
 white paint 933
- resistance**
 carbohydrates, metabolism 6580

Apple contd.

frost contd.

resistance contd.

- electrical conductivity 4994
- growth substances 8399
- plant nutrition 4971
- potassium nutrition 4974
- rootstock compatibility 2555
- rootstock-scion relationships 3392, 8351
- soil management, methods compared 6538
- stem tissues, variability 2587
- varietal resistance 6528
- varieties 4187
- USSR 924
- water relations 6574
- studies, artificial freezing techniques 7396

fruiting

- carbohydrates, metabolism 6579
- irrigation 8359
- precocity, rootstock-scion relationships 7312
- rootstock compatibility 2567

fungicides 3320

as acaricides

- benomyl 5734
- thiophanate 5734
- thiophanate-methyl 5734
- disorder incidence, DPA 5005
- earthworm populations
- benomyl 1752
- captan 1752
- thiabendazole 1752
- thiophanate 1752

enzyme activity, thiocarbamates,

- Polymarcin, triarimol 6578

fruit

- russetting 6560
- benomyl 1747, 8391
- Enovit 8391
- thiophanate-methyl 1747
- triarimol 1747
- thinning, thiram 974
- insecticide mixtures
- application, reduced concentration 2585
- fruit
- ascorbic acid, content 2585
- sugars, content 2585

mite populations

- captan 5737
- sulphur 1756

residues

- determination
- benomyl 7609
- binapacryl 7324
- folpet, captan, captafol 2505
- thiabendazole, benomyl 6501
- thiophanate 7610
- ethylenebisdithiocarbamates, fruit 4218

respiration, thiocarbamates, Polymarcin,

- triarimol 6578

soil micro-organisms

- benomyl 8391
- Enovit 8391

grading

- mechanical, roller 2532
- pre- and post-storage compared 6596
- size, consumer preference 7418
- work studies 918

growing

- containers, fruiting 869
- dwarf trees 4182
- economics
- Australia 1721
- USA 921, 921
- high altitudes 5721
- India 7311
- Hungary 4173
- Japan 5709
- for juice 1738
- Portugal, review 2518
- prostrate forms 5721
- terraced slopes 3391
- orientation 4964
- root systems 4965
- tropics 8335
- UK 3369

growth, inhibition, growth substances,

- abscisic acid 1777

Apple contd.

growth studies 8369-8370

relative humidity

- nitrogen nutrition 7351

soil moisture 7351

statistical techniques 8371

growth-yield relationships 4970

grubbing 3341

hail

damage

prevention

- nets 8355

economics 8356

harvesting

containers, polystyrene, economics 980

mechanical

bibliography 7409

branch

injury

- catching frames 2595

shakers 2595

catching frames 54, 977

branch injury 2595

fruit injury 2595

equipment 457

annual report, Canada 5695

fruit

injury

- catching frames 2595

shakers 2595, 2633

loosening

ascorbic acid 975

growth substances 975

mobile platform 3429

Plukpony 4953

shakers 978

branch injury 2595

fruit injury 2595, 2633

windfalls 3430

mobile platform 6588

packing, transport, storage, book 5706

time of

fruit colour chart 1787-1788

fruit maturity tests 1789-1790,

3428, 6587

fruit quality 6601

fruit storage quality 8422

heat, resistance, rootstock-scion

relationships 8354

herbicides

injury 7316

dicamba 2495

dichlobenil 4997

diuron 6543, 7357

metobromuron 7357

picloram 2495

leaf

nitrogen, content, simazine 968

sugars, content, simazine 968

residues

determination, 2,4-D 6514

soil

chlorthiamid, dichlobenil 6542

diuron 6543

simazine 6543

root

growth 1739

dichlobenil 4997

soil nutrient availability

atrazine 935

simazine 935

high density planting 7348

economics 7331

light interception 7354

rootstocks 8344

Switzerland, statistics 8324

varieties 8344

humidity, relative

growth studies

nitrogen nutrition 7351

soil moisture 7351

leaf, composition 2586

nitrogen nutrition 2586

hybrids

annual report, Tunisia 4944

apetalous 3420

insecticides 3318

application, economics 4153

flower bud, development, dimethoate

6572

fruit

russetting

carbaryl 1784

Apple contd.

insecticides contd.

fruit contd.

russetting contd.

dimethoate 1769

prevention, dimethoate 8383

size, carbaryl 3423

thinning, carbaryl 974, 1784,

3422-3423, 8405-8406

-fungicides mixtures

fruit

ascorbic acid, content 2585

sugars, content 2585

growth, increase 48

injury

oil 4989

tetrachlorvinphos 4289

leaf

sugars

content

Kelthane 3418

Sevin 3418

mite populations, DDT 5737

residues 3328

arsenic 3329

determination

chlorpyrifos 4142

monocrotophos 7302

fruit

chlorinated hydrocarbons 5740

methomyl 2507

leaf, monocrotophos 615

tolerance, oil 3411

intercropping, oat-vetch mixture 2560

interstocks 3389

comparative trials 3388, 6532, 6535

leaf, nutrients, content 4183

Malling rootstocks 930

Melba 6535

M.8 6535

M.9 6535

root composition 1727

root systems 6535

tree size 3387-3388

iron

content

leaf

seasonal variations 6554

varietal differences 6554

shoot

seasonal variations 6554

varietal differences 6554

irradiation

gamma rays

disease control 982

fruit, post-harvest 984

injury 3415-3416

mutation induction 5699

fruit russetting 963

pollen viability 3415

ionizing, mutation induction, fruit

russetting 962

irrigation 465

fertilizers, application 3394

flower bud, initiation 5717

fruit, size 6544

fruiting 8359

furrow 5717

recommendations 1734

requirements 7358

determination 6544

root, growth 7367

shoot, growth 6544

sprinkler 5717

water distribution 6515

trickle 3394, 4189

lead

determination 4389

residues 4936

light

absorption, pruning and training,

methods compared 4963

intensity

carbohydrates, content 1731

fruit

colour 7354

disorders 2605

size 7354

growth 1731

photosynthesis 3413

pruning and training 7360

water relations 8397

Subject Index

- Apple contd.**
 light contd.
 interception
 review 8357
 rootstock-scion relationships 7356
 sunlight, reflection 2557
 transmission, tree canopies 7355
 magnesium
 content
 leaf 6553
 seasonal variations 6554
 shoot, seasonal variations 6554
 manganese
 content
 leaf 6553
 varietal differences 6554
 shoot, varietal differences 6554
 mulching
 clover-grass mixture clippings 936
 leaf, potassium content 938
 clover-grass mowings 1736
 lucerne hay 5718
 sawdust 4191
 soil, moisture 6550
 mutants 5726, 6530
 mycorrhiza, soil, arsenic content 8373
 nitrogen
 absorption, nutrient solution,
 composition 4975
 content
 leaf 6553
 seasonal variations 6554
 shoot, seasonal variations, varietal
 differences 6554
 varietal differences 6554
 shoot
 seasonal variations 6554
 varietal differences 6554
 water deficiency 4962
 nucleic acids, applied, pollen, germination
 2651
 nutrient absorption
 nitrogen, nutrition 466
 nitrogen nutrition 4972
 planting 1773
 nutrients, content, leaf analysis 5726
 orchard renewal, frameworking 4157
 packing
 containers
 polystyrene, economics 980
 types compared 5754
 damage 7307
 fruit, pressure tolerance 2606
 orientation, mechanical 55
 plastic, films 982, 5753
 before storage 8415
 vibration
 fruit damage elimination 1802
 fruit settlement in box 1803
 phloridzin, content, shoot, bending 4998
 phosphorus
 content
 leaf 6553
 seasonal variations 6554
 varietal differences 6554
 shoot
 seasonal variations 6554
 varietal differences 6554
 metabolism, temperature 7401
 photoperiodism, leaf, composition 50
 photosynthesis
 air movement 3413
 carbon dioxide uptake 6573
 varietal differences 3412
 crown foliar density 7395
 drought 908
 fruiting relationships 4991, 6573
 leaf-fruit relationships 5745
 light intensity 3413, 7395
 pruning and training 4185, 4192, 7395
 rootstock-scion relationships 7356
 rootstock vigour 2573
 pigments, content, iron nutrition 6563
 planting
 bed systems 7347
 high density 464, 1737, 2548, 3390,
 3401, 7348
 economics 463
 for juice production 1738
 Netherlands 1729
 Switzerland 904
 material
 types compared 2568
- Apple contd.**
 planting contd.
 material contd.
 virus-free 464
 mechanical 1726
 nutrient absorption 1773
 plant, size 3401
 pruning before 1726
 root removal 1726
 soil, preparation, ploughing depth
 7359
 spacing 932, 2547, 2550-2551, 3401,
 6536, 7347-7348
 economics 7331
 fruit, quality 2604
 light interception 7354, 8357
 root systems 1740, 2548-2549
 spraying equipment 3408
 survey, Switzerland 904
 systems
 compared 464, 4960
 economics 3398
 light interception 4960, 8357
 pollination 7403
 trenches 7350
 water relations 1773
 pollen
 germination
 nucleic acids 2651
 temperature 7404
 viability, scions treatment, gamma rays
 3415
 pollen tube, growth, temperature 7404
 pollination 6581
 artificial 7405
 bees, *Osmia cornifrons* 1780
 cross- and self-compared 8404
 cross- and self- compared, fruit set
 2593
 planting systems 7403
 pollinating varieties 481, 973, 7403,
 8408
 supplementary 6582
 windbreaks 4222
 potassium
 absorption, nutrient solution,
 composition 4975
 content
 leaf 6553
 seasonal variations 6554
 varietal differences 6554
 shoot
 seasonal variations 6554
 varietal differences 6554
 processing
 peeled fruit
 ascorbic acid treatment 8420
 storage 8420
 production and trade
 EEC 3341
 UK 3341
 USA, estimation, mathematical model
 7415
 products and by-products
 juice
 chlorogenic acid, content 2609
 fluorescence 2609
 Oechsle values 5012
 quality 5012
 proteins
 biosynthesis, temperature 50
 content, water deficiency 4962
 metabolism
 ethylene biosynthesis 2590
 leaf, senescence 7400
 pruning and training 4194
 biennial 3397
 biennial bearing 4223
 Bramley's seedling 8341
 chemical
 disease control, *Podosphaera*
 leucotricha 2576
 growth substances 6576
 aminozide 1778, 3396, 5719
 NAA 2588
 TIBA 2588
 economics 3398, 6548
 espalier 5719
 fruit
 colour 3396
 composition 2564
 number 4968
 quality 3396
- Apple contd.**
 pruning and training contd.
 fruit contd.
 set 4197
 size 2564, 4968
 growth-fruit relationships 941-943
 hedgerows 4196
 high density planting 1737, 3401
 economics 463
 light intensity 7360
 mechanical 4230
 equipment 4230, 5703
 slotting saw 3396, 4196
 methods compared 940, 3398, 5720,
 6546-6548, 7360, 7362-7363, 8364,
 8366, 8379
 economics 7366
 flowering 8363
 fruiting 4967, 7361, 7365-7366,
 8363
 growth correlations 4967
 light absorption 4963
 shoot growth 8363
 work studies 8365
 nurseries, methods compared 7363,
 8348
 palmette 2565-2566
 carbohydrates, metabolism 3399
 photosynthesis 4185
 pinching, flower bud development
 7402
 post-prune growth 4966
 prostrate forms 5721
 root growth 8372
 regeneration 4192-4193
 rootstock relationships 8364
 shoot
 bending
 branching 939
 bud dormancy 939
 phloridzin, content 4998
 spur formation 939
 sugars, metabolism 3414
 water relations 960
 shoot bending 7362
 growth substances, endogenous 8367
 slender spindle 464, 4195, 5719
 time of 7364
 frost injury 8362
 temperature 8368
 transpiration 5741
 tree orientation
 flowering 3417
 growth reduction 3417
 varietal behaviour 4969, 5720,
 8360-8361, 8364
 water relations 5741
 regeneration
 pruning 4193
 fruit
 composition 2564
 quality 2563
 size 2564
 leaf, chlorophyll 4192
 photosynthesis 4192
 respiration 4192
 replanting 6551, 6561-6562
 soil
 fumigation 8381
 nematode control 5728, 6570
 soil micro-organisms 467, 6570, 7374
 report
 Australia 3344
 USA 8320
 respiration
 fruit 52
 calcium, content 1771
 development 4993
 ethylene, production 56
 growth substances 5003
 chlormequat 1786
 IAA 1772
 nitrogen, content 1771
 pollination 6581
 ripening 1772
 storage, controlled atmosphere,
 ethylene 981
 treatment, gamma rays, post-harvest
 7410-7411
 virus diseases 6565
 plant
 drought 908
 fungicides 6578

Apple contd.

- respiration *contd.*
 - pruning 4192
- ringing
 - flower bud, development 7402
 - fruiting relationships 6545
 - sugars, metabolism 3414
- sap, carbohydrates, content, seasonal variations 8403
- scoring
 - flower, number 966
 - shoot, growth 966
- soilless culture, nutritional studies 4975
- solar radiation, reflection 2557
- spraying
 - equipment
 - planting, spacing 3408
 - tower sprayer 2584
 - types compared, acaricides 2583
 - methods compared 473
 - mites, predaceous, population studies, apple 957
 - programmes 7371
- statistical
 - sampling, fruit 7330
 - techniques
 - growth studies 8371
 - mathematical model, disorder development 6595
- storage
 - ascorbic acid, content, wax coatings 8412
 - coatings, plastic 983-984
 - cold
 - disease incidence 2598
 - disorder incidence 1800-1801, 2598, 5005
 - fruit
 - colour 7411
 - composition, harvesting date 8422
 - enzyme activity 6592, 7412
 - firmness, harvesting date 8422
 - gas exchange 5004
 - gas exchange 5004
 - relative humidity, disorder incidence, disease incidence 4224
 - respiration, irradiation, gamma rays 7411
 - seed, composition 5712
 - temperature, disorder incidence, disease incidence 4224
 - varietal behaviour 8413
- containers 8415
- polystyrene, economics 980
- controlled atmosphere 5002
- chilling injury 1798
- disease incidence 985, 2598
- disorder incidence 1801, 2598, 4225
- ethylene removal 981
- fruit
 - colour 2597
 - composition 985
 - enzyme activity 6592, 7412
 - firmness 2597
 - flavour, irradiation, gamma rays 7410-7411
 - quality 2597
 - hypobaric 7326
 - packing methods compared 1791
 - relative humidity
 - disease incidence 4224
 - disorder incidence 4224
- respiration 981
 - irradiation, gamma rays 7410-7411
- small unit 8414
- dips 486, 3433
 - disease control 5750
 - Botrytis cinerea*, *Alternaria alternata*, *Penicillium expansum* 5007
 - Gloeosporium album* 990
 - disease incidence, DPA 5008
 - disorder control
 - internal breakdown, calcium 3432
 - scald
 - BHT 8419
 - DPA 8419
 - DPA, scald 1800
 - ethoxyquin, scald 1800
 - growth substances, GA 1797
 - injury
 - 2-amino butane 990

Apple contd.

- storage *contd.*
 - dips *contd.*
 - injury *contd.*
 - methyl-thiophanate 990
 - rot control
 - bordeaux 7413
 - zineb 7413
 - diseases 2601, 4227, 7413
 - disorders 1795, 1798-1799
 - coatings, plastic 983
 - growth substances 7408
 - pre-cooling 2597, 2600
 - volatile products 988
 - fruit, quality, harvesting time 1787-1788
 - fruit composition 7326
 - growth substances 7407
 - harvesting, date 8415
 - organic acids, content 5748
 - packing methods compared 1791, 2596
 - pest incidence, *Cydia pomonella* 987
 - plastic bags 5747
 - pre-cooling 8415
 - disorders 2597, 2600
 - equipment 2646
 - rots 2597, 2600
 - quality
 - cultural methods 6590
 - environmental factors 6590
 - rots 2597, 2600
 - Pezizula malicorticis*, incidence 5009
 - soil management 8415
 - varietal behaviour 6601-6602
 - ventilation, fruit disorders 989
 - water loss 1794
 - water removal from fruit in plastic bags, low temperature breakdown 487
 - wax coatings 2600, 8412
 - weight loss
 - varietal behaviour 5699
 - wax coatings 8412
 - wraps 8415
- storage buildings, controlled atmosphere, small unit 8414
- sugars
 - metabolism
 - leaf removal 3414
 - ringing 3414
 - shoot bending 3414
 - temperature
 - bud, development 1709
 - bud break, forecasting 2592
 - disorder incidence, watercore 8384
 - dormancy, breaking 907
 - flowering, forecasting 2592
 - fruit, growth 6597
 - phosphorus, metabolism 7401
 - protein, biosynthesis 50
 - pruning and training, time of 8368
 - shoot, growth 6597
 - sums, flowering, date, forecasting 4961
 - varietal behaviour 2540
- tissue culture
 - bud 1779
 - callus
 - carbon sources 972
 - grafting compatibility studies 3567
 - embryo 2591
 - media 2546
 - meristem 4184
 - shoot 2552
 - shoot-tip, growth substances, treatment 3419
- topworking
 - economics 8346
 - methods 8347
 - winter hardiness 8352
- transpiration
 - calcium, translocation 1775
 - pruning and training 5741
 - rootstocks 5741
- transport
 - containers, polystyrene, economics 980
 - damage 7307
- tree
 - crown foliar density, photosynthesis 7395
 - height
 - estimation, aerial photography 4174
 - light interception 8357
 - shape, light interception 8357

Apple contd.

- tree *contd.*
 - size, light interception 8357
 - water potential, leaf, measurement 1774
 - water relations 8397
 - chlorosis 8382
 - dormancy 6521
 - frost resistance 6574
 - leaf, copper, content 1742
 - nitrogen content 38
 - nutrition, seasonal variations 36-37
 - planting 1773
 - pruning and training 5741
 - shoot, bending 960
 - rootstocks 5741
 - temperature 6537
 - varietal behaviour 2540
 - winter hardiness 6574
- weed control 452, 2495, 2562, 6541-6543, 7316, 7357
 - annual report, Canada 5696
 - high density planting 464
 - nurseries 2561, 4188, 7316, 7357
 - perennial weeds 1732
- windbreaks, pollination 4222
- winter hardiness
 - boron nutrition 4976
 - bud dormancy 6575
 - dormancy 6521
 - leaf removal 6521
 - grafting method 8352
 - measurement 6539
 - rootstocks 7352
 - seed dormancy 2542
 - water relations 6574
- wound healing, treatments, Santar 4207
- yield
 - correlations
 - climate 8349
 - statistical methods 5699
 - yield-growth relationships 4970
- zinc
 - content
 - leaf
 - seasonal variations 6554
 - varietal differences 6554
 - shoot
 - seasonal variations 6554
 - varietal differences 6554
- Apple bark**, nutrients, content 5725
- Apple bud**
 - break, forecasting, temperature 2592
 - initiation, growth substances 6583
- Apple diseases**
 - Agrobacterium tumefaciens* 4206
 - Alternaria alternata*, post-harvest dips 5007
 - A. mali* 7379
 - A. spp.* 1753
 - Aspergillus niger* 2601
 - Australia 6518
 - blotch 8388
 - Botrytis cinerea*
 - fruit storage 485
 - post-harvest dips 5007
 - Botrytis* spp.
 - fruit storage 1798, 4224
 - post-harvest dips 986
 - chat fruit, varietal incidence 4204
 - chlorotic leaf spot 470
 - incidence 8387
 - Rumania 8389
 - USSR 8386
 - indicator plants 8389
 - Colletotrichum dematium*, pathogenicity 8515
 - Diaporthe perniciosus* 476
 - Erwinia amylovora*
 - alternative hosts 6519
 - German Democratic Republic 1746
 - varietal resistance 4208, 7336
 - flat limb 4948, 7378
 - fruit defects, graft transmissible 471
 - fruit rots 486, 4227
 - coatings, plastic 983
 - controlled atmosphere storage 985
 - irradiation 982
 - storage dips 5750
 - fruit storage 4226
 - Fusarium* spp., fruit storage 4224
 - Gloeodes pomigena* 1750
 - Gloeosporium album* 53, 990, 4985, 5006
 - fruit dips 3433

Subject Index

Apple diseases *contd.*

- Gloeosporium contd.*
G. fructigenum 5006
G. perennans 5006
G. spp. 486
 control 8391
 fruit storage 1798, 5751
 post-harvest dips 5751
Glomerella cingulata 1748–1749, 1754, 4209
 green crinkle 4948
 Jubilee ring-and-line pattern 8388
 leaf pucker 8388
 host reactions 8390
 indexing 8390
Macrophoma spp. 2577
 mosaic 4948, 6565
Mycosphaerella pomi 952
Nectria galligena 5006
 fruit storage 5751
 host benzoic acid, content 5755
 wound healing 4207
Oidium farinosum 5734
Penicillium expansum
 fruit storage 485
 post-harvest dips 5007
 storage diseases 5008
P. spp.
 control 7413
 fruit storage 4224
 post-harvest dips 986
 rot development 57
Pezicula malicorticis, incidence 5009
Phomopsis mali 1755
Phymatotrichum omnivorum 4257
Physalospora obtusa 1749
 control, cultural methods 7380
 incidence 6569
P. spp., control 7413
Phytophthora cactorum 7382
 resistance, seasonal variations 7381
 varietal resistance 7381
 platycarpa dwarf
 incidence, Rumania 8389
 indicator plants 8389
 platycarpa scaly bark 7378
 incidence 8387
 Rumania 8389
 indicator plants 8389
Podospaera leucotricha 45, 473, 1747, 3408, 4210–4211, 5731–5732, 7386
 chemical pruning 2576
 control 6560, 7323, 7384–7385, 7387–7388, 8391, 8482
 damage 953
 incidence 7383
 resistance 2539
 rootstock resistance 8345
 varietal resistance 953, 3377, 7336, 8380
 proliferation 4948, 7376
 detection 3406
 histology 4984
 leaf composition 6566, 7377
Pseudomonas syringae 3407
 ring russetting 6564
 ring spot 4948
 rough skin 4948
 rubbery wood 4948
 incidence, Rumania 8389
 indicator plants 8389
 russet ring 4948, 6565
 scar skin 4948
Sclerotinia fructigena, fruit storage 5751
S. spp., control 7413
 Spy 227 epinasty and decline
 incidence 8387
 Rumania 8389
 USSR 8386
 indicator plants 8389
 stem grooving 470
 incidence, Rumania 8389
 indicator plants 8389
 stem pitting 7378
 incidence, Rumania 8389
 indicator plants 8389
Stereum purpureum 8392
 rootstock resistance 8345
 storage rots 1747
Trichothecium spp., control 7413
Valsa mali
 boron nutrition 475
 nitrogen nutrition 475

Apple diseases *contd.*

- Valsa mali contd.*
 varietal resistance 475
Venturia inaequalis 45, 53, 473, 954, 1747, 1751, 5731, 5734, 5751
 aerial spraying 7372
 air pollution 4130
 control 4212, 6560, 6568, 7371, 8305, 8391, 8393, 8482
 fungicides, mite populations 5737
 post-harvest sprays 5733, 5735
 forecasting 1751, 4212
 incidence 7383
 leaf invasion, histological studies 474
 post-harvest foliar sprays 477
 post-harvest sprays 7389
 resistance 44, 5736
 varietal resistance 1722, 3374, 3377, 7336, 8340, 8380
 Virginia crab apple decline 1745
 virus
 control 464, 7320
 heat treatment 2537
 fruit symptoms 2575
 Golden Delicious 3405
 host enzyme activity 8402
 host reactions 2528, 4983
 New Zealand 472, 4982
 -tested plants
 EMLA scheme 2528
 Special Stock Certification Scheme 7320
 German Democratic Republic 7321
 yield reduction 7375
 witches broom 6567
Apple disorders 1798
 accelerated spoilage 5749
 bitter pit 865, 2602–2603, 8417
 calcium nutrition 947, 4990
 calcium sprays 1796
 fruit, size 2605
 growth substances
 aminozide 1796
 ethephon 1796
 incidence 6557
 light, intensity 2605
 nitrogen nutrition 4972
 review 6593
 varietal resistance 950
 breakdown, calcium nutrition 3431
 brown core, fruit storage 1801
 chlorosis 6563
 iron nutrition 4203, 4947, 4977
 leaf composition 8382
 lime-induced 949
 manganese nutrition 4203, 4977
 nitrogen nutrition 4977
 shoot composition 1741
 water relations 8382
 zinc nutrition 4977
 core flush 1795, 4224
 cork spot 469
 flesh breakdown 1795
 flesh browning 4224
 fruit malformation, nutrients content 468
 fruit pitting 469
 internal bark necrosis
 iron nutrition 4203
 manganese nutrition 4203
 internal breakdown 3432
 calcium metabolism 4221
 fruit calcium content 1771
 growth substances
 aminozide 976
 ethephon 976
 internal browning 1799
 enzyme activity 7412
 nitrogen nutrition 947
 Jonathan spot 484, 2600
 controlled atmosphere storage 985
 fruit, storage 2598
 growth substances 7408
 incidence 7373
 leaf scorch 4979
 lenticel rot 4980
 lenticel spot 2597, 2602–2603
 longitudinal trunk bark cracking 6533
 low temperature breakdown 1787–1788
 biochemistry 8418
 calcium nutrition 1793, 5005
 fruit, pigments 6594
 growth substances 7408
 GA 1797

Apple disorders *contd.*

- low temperature breakdown *contd.*
 post-harvest sprays 5005
 water removal 487
 physiological, fruit, potassium, content 4975
 rosetting 1742
 zinc deficiency 948
 russetting 951, 8383
 review 4981
 spray injury 1747
 scald 484–485, 488, 1787–1788, 1795, 2597
 controlled atmosphere storage 4225
 development, mathematical model 6595
 fruit, gas exchange 4225, 5004
 fruit dips 3433
 fruit storage 1800
 fruit wax structure 6524
 growth substances 8409
 post-harvest dips 8419
 volatile products 988
 soft scald, hexanol, content 7414
 stem-cavity browning, fruit storage 1801
 superficial browning, fruit storage 2599
 superficial scald, fruit maturity 989
 twig discoloration
 iron nutrition 4203
 manganese nutrition 4203
 various, soil management 6589
 vertical bark cracks 8351
 water core
 fruit calcium content 1771
 growth substances 8409
 shoot carbohydrates, content 8384
 temperature 8384
Apple flower
 bud
 calcium, content, biennial bearing 971
 nitrogen, content, biennial bearing 971
 potassium, content, biennial bearing 971
 bud development
 fungicides 6572
 leaf removal 7402
 pruning and training 939, 7402
 ringing 7402
 bud distribution on shoots, rootstocks 3392
 bud initiation 5742
 fruit thinning 3422
 irrigation 5717
 nitrogen nutrition 947, 8368
 time 4999
 nitrogen nutrition, phosphorus nutrition, soil management, rootstocks 2530
 number
 growth substances 8398
 aminozide 966
 nitrogen nutrition 8368
Apple flowering
 date, forecasting, temperature sums 2593
 temperature 2593
Apple fruit
 abscission
 growth substances
 aminozide 1783
 ethephon 1783
 fenoprop interaction 976
 acidity
 disease incidence, *Macrophoma spp.* 2577
 growth substances 3425
 amino acids, content, nitrogen nutrition 7370
 anatomy, russetting 963
 aroma 6604
 ascorbic acid
 content
 controlled atmosphere storage 985
 disease resistance, *Venturia inaequalis* 5736
 geographical location 6600
 latitude 7417, 7417
 nitrogen nutrition 8378, 8415
 spray concentration 2585
 varietal differences 7416–7417, 7417
 zinc nutrition 5011
 browning, peeled fruit 8420
 calcium
 content 4201

Apple fruit contd.

calcium contd.

content contd.

- fruit disorders 469, 3431
- respiration 1771
- seasonal variations 7351
- varietal differences 6606
- zinc nutrition 5011

carbohydrates

content

- seasonal variations 5010
- storage 5010

cell wall

composition 6603

permeability

- calcium 8417
- cold storage 8417
- ripening 8417

colour 7408

- biennial pruning 3397
- calcium nutrition 4980
- growth substances 3425, 5746, 6583, 8409
- aminozide 1796
- ethephon 976, 1796
- fenoprop 976
- harvesting time 1787-1788
- leaf nutrients content 6599
- light intensity 7354
- nitrogen nutrition 6605, 8368
- pruning and training 3396
- methods compared 3398

storage

- cold 7411
- controlled atmosphere 981

composition 7327

- carbohydrates, varietal differences 60
- flavour components 1804
- flavour relationships 6598-6599
- growth substances 8409
- nitrogen nutrition 6605, 8378
- organic acids
- varietal differences 60
- virus diseases 6565
- pollination 973
- pruning and training 2564
- soil management 6601-6602
- storage, controlled atmosphere, hypobaric 7326
- varietal differences 4228
- zinc nutrition 5011

cuticle 2607

structure 6524

development 8405

- enzyme activity 4993
- growth substances 6576
- after injury 8407
- respiration 4993

drop

- growth substances 3421, 5000, 5746, 6583, 7405-7406
- aminozide 1783, 3401
- NAA 3426
- 2,4,5-TP 3426

ethylene

- concentration, submersion 3837
- production

- growth substances 5003
- ABA 975

firmness

- growth substances 3425, 6583
- aminozide 976
- ethephon 976, 1783
- fenoprop 976
- SADH 482

flavour 1804, 6599

- evaluation, methods 6598
- irradiation, gamma rays, post-harvest 7410-7411
- varieties 59

- evaluation 3376

frost, injury 964

fumigation, injury, 2-amino butane 990

gas permeability, determination 959

growth, temperature 6597

growth substances 7408

hexanol, content, disorder incidence, soft scald 7414

injury, phellogen development 8407

irradiation, gamma rays, post-harvest, storage life 2601

-leaf relationships, photosynthesis 5745

Apple fruit contd.

loosening

- ascorbic acid 975
- growth substances 975

magnesium

content

- calcium nutrition 5005
- seasonal variations 7351

maturity 6585

growth substances

- aminozide 976
- ethephon 976

starch, content 3428

tests 1789-1790, 3427, 8410

nitrogen

content

- calcium nutrition 5005
- respiration 1771
- seasonal variations 7351

number

- nitrogen nutrition 8368
- potassium imbalance 4975
- pruning and training 4968

nutrients, content, fruit malformation 468

organic acids

content

- controlled atmosphere storage 985
- seasonal variations 6522
- storage 5748

pectins, content, geographical location 6600

peel

thickness

- boron nutrition 6559
- manganese nutrition 6559

phosphorus

content

- calcium nutrition 5005
- varietal differences 6606

physical characteristics 55

pigments 58

disorder incidence, low temperature breakdown 6594

distribution 4177

potassium

content

- organic acids, biosynthesis 4975
- seasonal variations 7351
- varietal differences 6606

proteins, biosynthesis, calcium content 1771

quality

- assessment, optical density 3434
- evaluation 488, 2608

foliar nutrition 8376

fungicides, Bavistin 5731

growth substances, review 1792

insecticides 48

leaf nutrients content 6599

pruning and training 2563, 3396

methods compared 3398

review 6597

soil, moisture 3395

soil management 6589, 6601-6602

variability 2608

varieties 59

respiration

growth substances

- aminozide 1783
- ethephon 1783

virus diseases 6565

ripening

biochemistry 3427

ethylene, production 56

growth substances 5746, 7406-7407, 8409

pigments 52

sunlight 61

russeting 1769

anatomy 963

evaluation method 41

fruit, thinning 2574

fungicides 8391

Golden Delicious 61

growth substances, SADH 482

insecticides

carbaryl 1784

tetrachlorvinphos 4289

prevention, insecticides, dimethoate 8383

spray concentration 6560

spraying equipment 3408

Apple fruit contd.

russeting contd.

susceptibility 42

sampling, methods 7330

set

- acaricides 7371
- fungicides 7371

growth substances 7405

GA, BA 1782

gibberellins 1781

insecticides 7371

Panonychus ulmi 7371

pollination 2593, 7405, 8408

pruning and training 4197

shape 55, 7408

growth substances, GA, BA 1782

size

biennial pruning 3397

breeding and selection 460

consumer preference 7418

green manuring 6550

growth substances 6583

SADH 5001

insecticides, carbaryl 3423

light intensity 7354

planting, spacing 3390

pruning and training 2564, 4968

soil, moisture 3395

thinning 3422

specific gravity 8421

starch, content, maturity tests 3428

storage, diseases, *Penicillium* spp. 57

sugars

content

- pest incidence 1760
- seasonal variations 6522

spray concentration 2585

tannins, content, geographical location 6600

thinning 3422

growth substances

NAA 974, 1785

tree physiological condition 1785

NAD 974, 1784

insecticides, carbaryl 1784, 3423, 8405-8406

russeting 2574

vitamins, content 3339

volatile constituents 6604

volatiles, production, calcium nutrition 1793

water, content, storage 1794

water loss, storage 1794

wax

- composition 2607
- structure 922, 6524

Apple fungicides

as acaricides

Acres 6571

Acridid 6571

Morestan 6571

Apple growth substances

absorption, abscisic acid 1777

apical dominance, BA 965

application

small quantities

aminozide 5710

2,4-D 5710

bud, initiation, aminozide 6583

calcium, translocation, TIBA 961

cuttings

treatment

GA 2543

IBA 2543

disease control

Off-Shoot O 2576

Off-Shoot T 2576

disorder incidence, ethephon 8409

dormancy, induction, abscisic acid 4220

dwarfing, aminozide 966

endogenous

biosynthesis 923

bud 5742

dormancy 6575

cuttings, rooting capacity 926

leaf 920, 4995

temperature 2553

root 4219, 4995, 7399

temperature 2553

seed 2523, 3380

shoot 4995, 7399

determination 1776

pruning and training 8367

Subject Index

Apple growth substances *contd.*

endogenous *contd.*
 shoot apices 47
 ethylene
 production
 ABA 975
 chlormequat 1786
 IAA 5003
 TIBA 5003
 flower
 number, aminozone 966
 number aminozone 8398
 flowering
 aminozone 3417
 GA 3417
 morphactins 5743
 NAD 3424
 frost resistance, aminozone 8399
 fruit
 abscission
 aminozone 1783
 ethephon 1783
 fenoprop interaction 976
 acidity, aminozone, ethephon, fenoprop 3425
 colour
 aminozone 1796, 3425, 5746, 6583, 7408
 ethephon 976, 1796, 3425, 5746, 8409
 fenoprop 976, 3425
 2,4,5-TP 5746
 composition, ethephon 8409
 development, aminozone 6576
 disorders
 aminozone 1796, 7408
 ethephon 1796
 NAA 5005
 phloridzin 5005
 drop
 aminozone 1783, 3401, 5746, 6583
 cytokinins 5000
 ethephon 6583, 7406
 GA 5000, 7405
 IAA 5000
 NAA 3421, 3426, 5000, 5746
 NRL 3421
 TIBA 5000
 2,4,5-TP 5746, 3426
 firmness
 aminozone 976, 3425, 6583
 ethephon 976, 1783, 3425, 6583
 fenoprop 976, 3425
 SADH 482
 flavour, 2,4,5-TP, aminozone, NAA, ethephon 5746
 loosening
 ABA 975
 cycloheximide 975
 ethephon 975
 NAA 975
 maturity
 aminozone 976
 ethephon 976
 quality
 review 1792
 SADH 488
 ripening
 ethephon 5746, 7406, 8409
 storage, review 7407
 russetting, SADH 482
 set
 BA 1782
 GA 1782, 7405
 gibberellins 1781
 shape
 aminozone 7408
 BA 1782
 GA 1782
 size
 aminozone, ethephon 6583
 SADH 5001
 storage-life, aminozone 7408
 storage life, 2,4,5-TP, aminozone, NAA, ethephon 5746
 thinning
 NAA 974, 1785
 NAD 974, 1784
 growth inhibition, abscisic acid 1777
 growth reduction
 aminozone 1731, 3417
 GA 3417

Apple growth substances *contd.*

injury
 cytokinins 1781
 ethephon 7314
 2,4,5-TP 5729
 interaction
 applied
 abscisic acid, and endogenous 3380
 BA, and endogenous 2553
 kinetin, and endogenous 2553
 morphactins, NAA + BA application 8400
 rootstocks, GA 4220
 leaf, removal, ethephon 6511, 7314
 pest control, *Aphis pomi*, aminozone 4214
 pruning
 aminozone 1778, 3396, 5719, 6576
 NAA 2588
 Off-Shoot O 2576
 Off-Shoot T 2576
 TIBA 2588
 residues, SADH 480, 5001
 respiration
 chlormequat 1786
 fruit
 aminozone 1783
 ethephon 1783
 IAA 1772, 5003
 TIBA 5003
 responses
 aminozone 1776, 3360
 chlormequat 1776
 retardants
 aminozone 4996, 6577, 8398
 chlormequat 4996, 6577, 8398
 Phosphon D 8398
 vegetable oils 4996
 shoot
 anatomy
 BA 8400
 GA 8400
 morphactins 8400
 NAA 8400
 growth
 aminozone 3401
 cytokinin, tissue culture 3419
 GA, tissue culture 3419
 storage disorders
 ethephon 976
 GA 1797
Apple leaf
 area, planting, spacing 3390
 calcium, content, biennial bearing 970–971
 cell sap, concentration, seasonal variations 916
 cell sap concentration, pruning 4193
 chlorophyll
 content 928
 fruiting relationships 6573
 pruning 4192
 composition
 chlorosis 8382
 hydroxybenzoic acids 51
 iron nutrition 6563
 nitrogen, variations 38
 nitrogen nutrition 4972
 potassium 4979
 proliferation virus 6566
 seasonal variation 50
 soil
 pH 1743
 salinity 1743
 copper, content 1742
 -fruit relationships 4991
 photosynthesis 5745
 histology, shoot type 4991
 nitrogen
 content
 biennial bearing 970–971
 cover crops 8375
 herbicides, simazine 968
 seasonal variations 5723
 nutrient absorption, nitrogen nutrition 2571
 nutrients
 content 3404, 4978, 5726
 cation, interactions 3404
 humidity 2586
 interstocks 4183
 rootstocks 3404

Apple leaf *contd.*

nutrients *contd.*
 content *contd.*
 seasonal variations, varietal differences 6554
 phosphorus
 content
 biennial bearing 970
 cover crops 8375
 seasonal variations 5723
 physiology, shoot type 4991
 pigments, content, fruiting relationships 6573
 position
 histology 4991
 physiology 4991
 potassium
 content
 biennial bearing 971
 cover crops 8375
 seasonal variations 5723
 removal
 chemical 6510–6511, 7314
 flower bud development 7402
 sugars, metabolism 3414
 senescence
 chlorophyll, degradation 7400
 nitrogen absorption 2571
 proteins, metabolism 7400
 sugars
 content
 herbicides 968
 insecticides 3418
 water content, pruning 4193
 zinc, content 8385
Apple nutrition
 aluminium
 calcium absorption 5730
 magnesium absorption 5730
 potassium absorption 5730
 toxicity 5730
 boron
 fruit, peel thickness 6559
 leaf
 chlorophyll, content 4976
 pigments, content 4976
 leaf analysis 3402
 winter hardness 4976
 calcium
 absorption 1741, 5730
 application, with plant protectants 4990
 deficiency
 cork spot 469
 fruit disorders 2602–2603
 fruit pitting 469
 disorder incidence 5005
 bitter pit 8417
 lenticel rot 4980
 fruit
 cell wall permeability 8417
 colour 4980
 disorders 1793, 3431
 volatiles, production 1793
 leaf analysis 3402
 placement 40
 methods compared, root growth 8377
 plant, composition 5725
 copper
 deficiency
 leaf analysis 1742
 soil analysis 1742
 toxicity 1742
 fertilizers
 application, irrigation 3394
 placement
 depth 946
 planting trenches 7350
 root systems 1733
 fluorine, toxicity, leaf pigmentation 5015
 FYM 4200, 6550
 disorder incidence 6589
 general 6550
 application, foliar 8376
 cold, resistance 4180
 leaf analysis 7369
 symposium 2489
 green manures 936, 6550
 disorder incidence 6589
 frost resistance 6538
 root, growth 1739
 types compared 8374

Apple nutrition *contd.*

- iron
 - chlorosis 4947, 6563
 - leaf, composition 4977
 - lime-induced chlorosis 949
 - manganese imbalance 4203
 - plant, composition 5725
 - magnesium
 - deficiency 6558
 - leaf analysis 3402, 7368
 - plant, composition 5725
 - manganese
 - fruit, peel thickness 6559
 - iron imbalance 4203
 - leaf, composition 4977
 - leaf analysis 3402
 - minor elements 4199
 - nitrogen 466, 6555-6556
 - application
 - foliar 2571
 - methods compared 947
 - time 39, 4972
 - frost resistance 4971
 - bud-break 4973
 - disorder incidence 4972
 - enzyme activity 7398
 - flower, number 8368
 - flower bud, initiation 8368
 - fruit
 - amino acids, content 7370
 - ascorbic acid, content 8415
 - colour 6605, 8368
 - composition 6605, 8378
 - number 8368
 - storage life, composition 6557
 - leaf
 - composition 4977
 - fall 4973
 - pigments 5724
 - leaf analysis 3402, 8375
 - light absorption 5724
 - phosphorus absorption 466
 - placement, methods compared, root growth 8377
 - plant
 - composition 5725
 - amino acids 49
 - potassium absorption 466
 - relative humidity 7351
 - soil moisture 7351
 - sources
 - bitter pit incidence 947
 - compared 4972, 8378
 - respiration 1771
- NPK 4200
- application
 - foliar 4199
 - methods compared 4199
 - budding 931
 - disorder incidence 6589
 - fruit, quality 6589
 - fruit analysis 4199
 - leaf analysis 4199
 - soil management methods compared 8358
 - plant, composition 51
 - soil analysis 4199
 - soil management methods compared 8358
- organic fertilizers, placement, methods compared, root growth 8377
- phosphorus 6555-6556
- absorption 2573
 - flowering 7368
 - fruit, storage life, composition 6557
 - leaf
 - copper, content 1742
 - zinc, content 1742
 - leaf analysis 3402, 7368, 8375
 - placement, methods compared, root growth 8377
 - plant, composition 5725
- potassium 6555
- chlorophyll, content, leaf 5723
 - deficiency 4979
 - fruit, storage life, composition 6557
 - leaf analysis 3402, 8375
 - placement, methods compared, root growth 8377
 - plant, composition 5725
 - sources, frost resistance 4974
- water relations, seasonal variations 36-37

Apple nutrition *contd.*

- WUXAL 4198
 - zinc 2605
 - application, foliar 5011
 - deficiency 948, 8385
 - fruit, composition 5011
 - leaf, composition 4977
- Apple pests 1696, 1762
- Adoxophyes orana* 478, 1765
 - A. reticulana*, control 7392
 - Aegeria myopaeformis* 4215
 - biological control 3409
 - control 7393
 - annual report, Canada 2515
 - aphids
 - integrated control 2579
 - parasites, population studies 2578
 - predator-prey relationships 2578
 - predators, population studies 2578
 - Aphis pomi* 5738
 - control, growth substances, aminozone 4214
 - Archips argyrospilus* 46
 - Archips podana*, control 4988, 7392
 - Archips* spp. 478, 2580
 - A. xylosteana*
 - control 7392
 - parasites, *Trichogramma* spp. 2580
 - Argyresthia conjugella*, population survey 4216
 - Australia 6518
 - Bryobia arborea*, population studies, fungicides 5737
 - B. rubrioculus*, control 7391
 - Cacoecia podana* 5738
 - Capua reticulana* 5738
 - Carposina niponensis*, forecasting 1757
 - Cemiotoma scitella* 5738
 - Conotrachelus nenuphar* 4289
 - Cydia pomonella* 48, 958, 1744, 1758, 1762, 1767
 - aerial spraying 7372
 - biological control 5739, 8395
 - control 8396
 - forecasting 1761
 - male traps 1766
 - fruit, storage 987
 - fungal parasites 1768
 - host-pest relationships 3410
 - integrated control 5739
 - population studies 5739
 - traps 479
 - varietal resistance 8380
 - Dasyneura mali* 1763, 2581
 - Dysaphis devectora*, resistance 2539
 - D. plantaginea*, resistance 2539
 - ecological studies 956
 - Eotetranychus uncatus*, population studies, fungicides 5737
 - Epiphyas postvittana* 1767
 - Hoplocampa testudinea*, varietal resistance 8380
 - Lithocolletis blancardella* 5738
 - L. purifoliella* 4217
 - Lygus pabulinus* 478
 - mites 3324
 - aerial spraying 7372
 - biological control 29
 - control 6560
 - nematodes, control, soil steaming 6562
 - Pandemis heparana*, control 7392
 - P. ribeana*, control 7392
 - P.* spp. 478
 - Panonychus ulmi* 30, 455, 473, 1744, 3408, 5731, 5738, 6571
 - control 4950, 4987, 7384, 7390-7391
 - fungicides 5734
 - growth substances, aminozone 4214
 - damage 953
 - forecasting 1757
 - fruit set 7371
 - incidence 7394
 - integrated control 8394
 - population studies 4986
 - fungicides 5737
 - predators 4213
 - Zetzellia mali* 1756
 - varietal resistance 953
 - Pratylenchus penetrans* 6570
 - Pseudococcus comstocki*, forecasting 1757
 - P. maritimus* 1767
 - review, Bolivia 5671

Apple pests *contd.*

- Sappaphis devectora*, resistance 44
 - Stigmella malella* 1760, 4217
 - Tetranychus mcdanieli* 46
 - T. telarius* 5738
 - control 7391
 - Thomasiniana oculiperda* 2582
 - tortix moths
 - control 4988
 - varietal resistance 8380
 - Tortricidae, review 7282
 - various, control 6586, 7371
- Apple propagation
- budding
 - double-shield 6532
 - height 4176
 - nutrition 931
 - seedling rootstocks in seed-bed 7346
 - cuttings
 - mist 2544
 - under plastic 2544
 - polarity 2543
 - rooting capacity, growth substances, endogenous 926
 - shoot
 - age 4178
 - part 4178
 - treatment
 - etiolation 7338
 - growth substances 2544, 4178
 - IBA 7338
 - vitamins 2544, 7338
- grafting
- bench-grafting 7339
 - graft storage, temperature 4181
 - graft treatment, paraffin 7340
 - height, cold resistance 4180
 - methods, winter hardiness 8352
 - rootstocks, planting, spacing 7349
 - scions treatment, gamma rays, injury 3415
 - union, protection 5714
- layering, root development, shoot anatomy 7332
- meristem, tissue culture 4184
 - nursery stock
 - defoliation 5716
 - root pruning, annual report, Netherlands 2516
- Apple root
- composition 1727
 - development, shoot anatomy, layers 7332
 - growth 944, 2569, 3400
 - cover crop management 934
 - fertilizer placement 8377
 - rootstock compatibility 2567
 - soil, moisture 7367
- hardiness
- soil moisture 8353
 - soil temperature 8353
 - nutrients, content 5725
 - shoot relationships, annual report, UK 3346
- systems 944-945, 1733, 3400
- planting, spacing 1740, 2548-2549
 - soil management 1739
 - temperature 2553
- Apple rootstocks
- Alnarp 7343
 - annual report, Italy 6507
 - breeding and selection, vigour, pollen sources 4958
 - carbohydrates, content 928
 - comparative trials 3382, 3398, 4959
 - A2 3385-3386, 7342
 - Doucine 6534
 - F11 8342
 - G7 8342
 - H35 3384
 - M. 35, 929, 3384-3386, 5715, 6534, 7342, 8341-8342
 - Malling 927
 - MC107 7342
 - MM. 35, 929, 3383-3386, 7342, 8341-8342
 - Pakistan 7344
 - Paradise 6534
 - Rumania 7341-7342
 - s Ma 3384
 - seedling 35, 3383, 5715
 - UK 8341-8342
 - USSR 8343
 - compatibility 2567

Apple rootstocks *contd.*

- compatibility *contd.*
 - frost resistance 2555
- disease incidence
 - chlorotic leaf spot 8386–8387
 - flat limb 7378
 - platycarpa scaly bark 7378, 8387
 - Spy 227 epinasty and decline 8386–8387
 - stem pitting 7378
- disease resistance
 - Podosphaera leucotricha* 8345
 - Stereum purpureum* 8345
- flower bud, initiation 2530
- growth substances, absorption, abscisic acid 1777
- heat resistance 2553
- high density planting 464, 8344
- economics 463
- interaction
 - growth substances 4220
 - herbicides, dichlobenil 4997
- M., growth substances, endogenous 4995
- Manchu crab 3387
- M.7 3387
- nutrition, NPK 3403
- own-rooted plants compared 3400
- propagation
 - cuttings 2544
 - leaf removal 3381
 - treatment
 - etiolation 7338
 - growth substances 7338
 - vitamins 7338
- scion relationships 3387
- disease resistance
 - Podosphaera leucotricha* 8345
 - Stereum purpureum* 8345
- disorder incidence, longitudinal trunk bark cracking 6533
- drought resistance 5741, 8354
- dwarfing 4182
- flower bud, position on shoot 3392
- flowering 7312
- frost, resistance 927
- frost resistance 3392, 8351
- fruiting precocity 927, 3383, 3385, 7312
- heat resistance 8354
- incompatibility 7345
- leaf
 - area 8344
 - composition 3404
 - light interception 7356
 - photosynthesis 2573, 7356
 - pruning and training 8364
- root
 - growth 2567, 2569, 3400
 - systems 3400
- shoot, growth 7312
- vigour 7312
 - growth substances, endogenous 4995
- water relations 5741
- winter hardiness 7352
- seedling, compatibility 2545
- selection methods, plant composition 928
- virus-tested plants, EMLA scheme 7320
- winter hardiness 7352

Apple seed

- carbohydrates, content, fruit, cold storage 5712
- development, pollination 8408
- dormancy
 - varietal differences 5713
 - winter hardiness 2542
- germination, metabolic processes 2523
- phloridzin, content 4957
- ripening, pollination 6581
- treatment
 - gamma rays, stratification 6531
 - growth substances, abscisic acid 3380
 - stratification 2542
 - gamma rays 6531
 - growth substances, content 3380
 - metabolic processes 2523
 - phloridzin, content 4957
 - temperature 5713

Apple shoot

- anatomy
 - growth substances 8400
 - root development, layers 7332
- composition
 - amino acids, shoot location 969

Apple shoot *contd.*

- composition *contd.*
 - cytokinins 47
 - hydroxybenzoic acids 51
 - nitrogen, seasonal variations 49
 - sugars, shoot location 969
- ethylene, production, growth substances, ABA 975
- flower bud distribution, rootstocks 3392
- growth 8369
 - temperature 6597
- length, number correlations 8370
- nitrogen, content, seasonal variations 5723
- number, length correlations 8370
- nutrients
 - content 5725
 - seasonal variations, varietal differences 6554
- phosphorus, content, seasonal variations 5723
- potassium, content, seasonal variations 5723
- root relationships, annual report, UK 3346

Apple soil

- cultivation
 - depth 5699
 - root, systems 1733
- erosion, control 938
- fumigation
 - nematode control 5728
 - root growth, Ditraxex 5728
 - soil sickness, chloropicrin 8381
- humus, content 2572
- management
 - disorder incidence 6589
 - fruit composition 6601–6602
 - fruit quality 6601–6602
 - fruit storage quality 6589
 - high density planting 464
 - methods compared 1735, 2559, 5718, 6550, 8374
 - leaf analysis 8358
 - soil analysis 8358
 - soil temperature 6540
 - NPK contents, soil 938
- micro-organisms
 - cover crops, grass sward 2559
 - fungicides 8391
 - replanting 467, 6570, 7374
 - soil management 937
- moisture 3395
- chlorosis 8382
- content 2572
- drought resistance 4962
- intercropping, oat-vetch mixture 2560
- root growth 7367
- root hardness 8353
- soil management 937
- nitrates, content 2572
- nitrogen, content 2572
- organic contents, cover crop management 934
- pH, leaf, composition 1743
- phosphorus, content 2572
- salinity, leaf, composition 1743
- sickness 4202
 - fumigation 8381
 - micro-organisms
 - control 7374
 - irradiation 7374
 - soil pH 7374
 - steaming, temperature 6561–6562
- steaming
 - seedling growth 6561
 - soil sickness 6561
- structure, soil management 937, 2570
- temperature 2553
 - frost injury 2554
 - root damage 2553
 - root hardness 8353
 - soil management, methods compared 6540

Apple trunk, girth, green manuring 6550**Apple varieties**

- Alkmene 6529
- Antonovka Obysknoennaya, mutants 8338
- Aport, climate 8350
- Aroma 7337
- Belle de Boskoop
 - pruning and training 8360

Apple varieties *contd.*

- Belle de Boskoop *contd.*
 - storage behaviour 8416
 - strains 8339
- Benoni, pollination 8404
- Blushing Gold 7334
- čaćanska Pozna 3377
- Canada 1724
- comparative studies, South Africa 8322
- comparative trials
 - Bulgaria 5722
 - Netherlands 4176
 - Poland 7333
 - UK 1723
- Crispin 6530, 7334
- Criterian 7334
- Discovery 6529
- disease incidence
 - chat fruit 4204
 - chlorotic leaf spot 8386–8387
 - flat limb 7378
 - platycarpa scaly bark 7378, 8387
 - Spy 227 epinasty and decline 8386–8387
 - stem pitting 7378
- disease resistance
 - Alternaria mali* 7379
 - Erwinia amylovora* 4208, 7336
 - Phytophthora cactorum* 7381
 - Podosphaera leucotricha* 3377, 7336, 7386, 8380
 - Valsa mali* 475
 - Venturia inaequalis* 1722, 3374, 3377, 5736, 7336, 8380
- disorder incidence, bitter pit 950
- drought resistance 8354
- Elstar 6529
- frost resistance 4187, 6528
- USSR 924
- fruit
 - ascorbic acid, content 4228, 7416–7417
 - composition 4228, 6606
 - flavour 3376
 - organic acids, content 4228
 - ripening time 6587
 - size, consumer preference 7418
 - vitamin P, content 7417
- Gloster 69 6530
- Golden Delicious
 - clonal variation 61
 - disease incidence, virus 3405
- Granny Smith 6530
- heat resistance 2540, 8354
- high density planting 464, 3390, 8344
- Switzerland 904
- Idared 6530
- identification, shoots, nursery 3354
- Jamba 69 3378, 6529
- James Grieve, pollination 8404
- James Grieve Lired, pollination 8404
- Jonagold 6530
- Jonamac 7335
- Jonathan 1725
- Jonathan group, disorder incidence, internal browning 1799
- Jonathan mutants 1725
- Karmijn de Sonnaville 6529
- Lindel 3379
- Magnolia Gold 7334
- Maigold 7334
- Mantet 6529
 - biennial bearing 4223
- Melrose 6530
- Orange de Sonnaville 6529
- Ozark Gold 7334
- pest resistance
 - Cydia pomonella* 8380
 - Hoplocampa testudinea* 8380
 - tortrix moths 8380
- pollen compatibility 481
- pollination 7403
- Prime Gold 7334
- Priscilla 7336
- Prize Wagener, high density planting, USSR 925
- pruning and training 4969, 5720, 8364
- Red Benoni 6529
- register
 - International 3353
 - UK 34, 3353
 - USA 3356, 4156
- rootstock compatibility 2545

Apple varieties contd.

- seed, dormancy 5713
- Severnyi Sinap, pollination 973
- Sinta 1724, 2541
- Smoothie 6530
- Spencer 1724
- spur types 464
- Starking Delicious, storage behaviour 7412
- storage behaviour 2597, 5699, 8413
- Stoyanova Krasavitsa 8340
- sub-tropics 6527
- Summerland 1724
- Summerred 1724
- survey, Switzerland 904
- Sylvia 7337
- tropics 8335
- Tunisia 4155
- USA 4208
- USSR 924, 2521
- virus-tested clones, EMLA scheme 2528, 7320
- water relations 2540
- Winston 6530
- pruning and training 8361
- winter hardiness, USA 3358
- Yugoslavia 2594, 3375
- Apple wood, nutrients, content 5725**
- Apricot**
 - annual report
 - Australia 5693
 - Canada 2515, 8314
 - Tunisia 4944
 - USA 24
 - breeding and selection
 - annual report, USA 3348
 - cold resistance 3435
 - for processing 3435
 - dormancy, growth substances, endogenous 5758
 - enzyme activity
 - inhibition, fungicides 4952
 - leaf, fungicides, bordeaux mixture 4952
 - enzymes, leaf, taxonomy 7419
 - ethylene, fruit, ripening 8428
 - fatty acids, seed 8424
 - flowering, date, forecasting, temperature sums 2379
 - frost
 - injury 8425
 - bud development 1709
 - flower bud 4235
 - leaf, removal 5756
 - resistance, varieties 7420
 - fruiting, date, forecasting, temperature sums 2379
 - fungicides
 - enzyme activity
 - bordeaux mixture 4952
 - inhibition 4952
 - injury, bordeaux 6612
 - residues, determination, folpet, captan, captafol 2505
 - respiration, leaf 4951
 - growing
 - Germany 62
 - high altitudes, India 7311
 - review 490, 4229
 - USSR 4251
 - high density planting, Switzerland, statistics 8324
 - hybrids 3435
 - interstocks 5014
 - irrigation, requirements 4160
 - phenolic compounds, metabolism, disease resistance 1805
 - planting
 - high density, Switzerland 904
 - survey, Switzerland 904
 - pollen, germination, morphology 8330
 - processing, canning 2615
 - pruning and training 6607
 - annual report, Australia 450
 - irrigation 4253
 - mechanical 4230
 - equipment 4230
 - respiration, fruit, ripening 8428
 - ringing, leaf-fruit relationships 8427
 - as a rootstock
 - peach 76
 - plum 5798
 - rootstocks, review 490

Apricot contd.

- sterols, seed 8424
- stomata
 - movements
 - relative humidity 8426
 - temperature 8426
- storage
 - controlled atmosphere
 - fruit
 - acidity 2615
 - flavour 2615
 - hypobaric 7326
 - varietal behaviour 2615
 - fruit composition 7326
 - taxonomy, enzymes 7419
 - temperature
 - bud, development 1709
 - stomata, movements 8426
 - transpiration 8426
 - water relations 8426
 - topworking 992
 - transport
 - containers, refrigerated 7426
 - in water 1718
 - tree, volume, estimation 8452
 - vitamin E, seed 8424
 - water relations
 - relative humidity 8426
 - stomata, movements 8426
 - temperature 8426
 - weed control 7316
 - nurseries 7316
 - wild, USSR 2610
 - winter hardiness 4251
 - leaf, removal 5756
 - varietal differences 5756
- Apricot diseases**
 - Botryodiplodia malorum* 6610
 - chlorotic leaf roll 6608
 - Cytospora cincta* 7423
 - C. spp.* 8425
 - host sugars, content 5757
 - Eutypa armeniaca* 3437
 - general 63
 - Gnomonia erythrostoma*, control 6611
 - line pattern 4948
 - Phomopsis spp.*, infection process 7449
 - plum pox 4948
 - Polystigma rubrum*, varietal resistance 7420
 - prune dwarf 4948
 - Pseudomonas syringae* 7423
 - annual report, German Federal Republic 8315
 - Rhizopus arrhizus*
 - fruit
 - ascorbic acid, content 2616
 - phenolic compounds, content 2616
 - Sclerotinia fructigena* 2613
 - fruit sugars, content 5757
 - S. laxa* 2614
 - control 6612
 - damage, leaf pigmentation 5015
 - stem pitting, incidence 5768
 - Verticillium dahliae*
 - host-pathogen relationships 1805
 - resistance 1805
 - V. spp.* 8425
 - virus, annual report, German Federal Republic 6506
- Apricot disorders**
 - apoplexy 63
 - fungus relationships, *Phytophthora spp.* 454
 - review 8425
 - gummosis 63
- Apricot flower, morphology, growth correlations 4164**
- Apricot fruit**
 - amino acids, content 494
 - boron, content 993
 - composition 7327
 - ripening 8428
 - storage, controlled atmosphere, hypobaric 7326
 - volatile constituents 5793
 - development, leaf area 8427
 - drop, growth substances, MH 994
 - leaf relationships 8427
 - organic acids, content, seasonal variations 6522
 - proteins, content 4941

Apricot fruit contd.

- ripening
 - composition 8428
 - ethylene
 - annual report, Australia 8313
 - production 8428
 - respiration 8428
 - size, growth substances 7425
 - sugars, content, seasonal variations 6522
 - thinning, growth substances 6613
- Apricot growth substances**
 - absorption, foliar, abscisic acid, NAA, 2,4-D 2885
- cell
 - expansion
 - GA 7425
 - 2,4,5-T 7425
- endogenous 5758
 - plant, dormancy 5758
 - report, Australia 3344
 - seed 2523
- fruit
 - drop, MH 994
 - size
 - GA 7425
 - 2,4,5-T 7425
 - thinning, NAA, MH, 2,4-D, 2,4,5-T 6613
- interaction, GA, 2,4,5-T application 7425
- leaf
 - morphology
 - aminozide 6613
 - 2,4-D 6613
 - MH 6613
 - NAA 6613
 - 2,4,5-T 6613
- responses
 - chlormequat 8329
 - review 8310
 - MH 7424
- seed, abortion, MH 7424
- shoot
 - morphology
 - aminozide 6613
 - 2,4-D 6613
 - MH 6613
 - NAA 6613
 - 2,4,5-T 6613
 - translocation, MH 7424
- Apricot leaf**
 - cell sap, concentration, seasonal variations 916
- cuticle
 - growth substances, absorption 2885
 - nitrogen absorption 2612
- fall, frost, injury 5756
- fruit relationships 8427
- morphology, growth substances 6613
- removal, frost, injury 5756
- wax, nitrogen absorption 2612

Apricot nutrition

- Algifer, fruit, firmness, ripening, storage life 4265
- boron, deficiency 993
- green manures 5014
- nitrogen 7422
 - application, foliar 2612
- NPK 491
 - leaf analysis 492
- phosphorus 7422
- potassium 7422
- Vollhumon 5014

Apricot pests

- general 63
- mites, biological control 29
- Scolytus mediterraneus*, host preference 94

- Serrodes partita*, traps, light 4259

Apricot propagation 26

- cuttings
 - root, treatment, growth substances, IBA 8323
 - rooting capacity 905
- shoot
 - age 4178
 - part 4178
 - treatment, growth substances 4178
- Apricot root, growth, rootstock -scion relationships 3436**
- Apricot rootstocks**
 - almond 2638
 - apricot 2638

- Apricot rootstocks** *contd.*
 apricot seedlings 991
 chlorosis resistance 2638
 comparative trials, Austria 5014
 disease resistance 2638
 nematode resistance 2638
 peach 2638
 plum 2638
Prunus armeniaca, compatibility 2611
P. sibirica, compatibility 2611
P. spp. 991
 -scion relationships 2611
 root, growth 3436
 seedling, comparative studies 7421
- Apricot seed**
 abortion, growth substances 7424
 germination, metabolic processes 2523
 treatment, stratification, metabolic processes 2523
- Apricot varieties** 493
 Alessandrinische Aprikose 5013
 Ambrosia 5013
 annual report, USA 3349
 Bulda 5013
 Canada 1724
 comparative studies
 German Federal Republic 8423
 South Africa 8327
 comparative trials, Austria 5014
 Early Blenheim 1724
 Festivalna 7420
 Früher Sämling von Radowitsch 489
 Hungary 1679
 Kecskemeter Rosenaprikose 489
 Kesterter Schafsnase 5013
 Klosterneuburger Marille 489
 processing, freezing 1814-1815
 register, USA 3356, 4156
 Saint-Jean 5013
 Sämling von Hinterholzer 489
 storage behaviour 2615
 Tunisia 4155
 Ungarische Beste 489
 winter hardiness 5756
- Aquatic weeds**, control 437
- Aquilegia**, tissue culture, flower bud, growth substances 3856
- Arachnis spp.**, mycorrhiza 5459
- Araecerus fasciculatus**, bean storage, coffee pests 8156-8157
- Aralia mandshurica**, composition 3961
- A. spp.**
 diterpenes
 content 3068
 metabolism 3068
- Aranda spp.**
 flower
 bud initiation
 decapitation 6210
 inhibition, growth substances 6210
 stem incisions 6210
 growth substances, flower bud, initiation, inhibition, IAA 6210
- Arboretum**, Trompenburg, Rotterdam, Netherlands 3906
- Arboricides**
 cacodylic acid, coconut 3189
 chloramp, grapevine 581
 2,4-D 2, coconut 3189
 Dianat, grapevine 581
 picolinic acid, coconut 3189
 sodium arsenate, coconut 3189
 sodium arsenite, disease incidence, planting site preparation, rubber 7223
 2,4,5-T, disease incidence, planting site preparation, rubber 7223
- Arbutus andrachne** 2302
- A. spp.**
 diseases, *Hendersonnula toruloidea*, annual report, USA 1315
 growing 7040
- Archangelica decurrens**
 coumarins 6283
 essential oil, content 8988
- Archips argyrospilus**, apple pests 46
- A. podana**
 apple pests, annual report, UK 4172
 control, apple pests 4988, 7392
- A. podanus**, forecasting, light traps 1764
- A. rosanus**, forecasting, light traps 1764
- Archips spp.**
 apple pests 478, 2580
 cherry pests 2580
- Archips** *contd.*
A. xylosteana
 control, apple pests 7392
 parasites
Trichogramma spp.
 apple pests 2580
 cherry pests 2580
- Arctotheca calendula**, ground cover plants, growth retardants 6157
- Ardesia spp.**, growth substances, responses, GA, annual report, USA 6129
- Ardis brunniventris**
 parasites, rose pests, annual report, Netherlands 6961
 rose pests, annual report, Netherlands 4604
- Areca diseases**, yellow leaf, leaf anatomy 7172
- Areca flower**, perianth aestivation 4831
- Areca leaf**
 anatomy 7172
 cation exchange capacity 3176
- Areca pests**, *Contheyla rotunda*, alternative hosts 9156
- Areca root**, cation exchange capacity 3176
- Areca seed**, germination 9125
- Areca spp.**
 leaf
 chlorophyll, content 1535
 organic acids, content 1535
- Argemone subfusiformis**, alkaloids 3964
- Argyresthia conjugella**, population survey, apple pests 4216
- Argyroploce umbrosana**, forecasting, light traps 1764
- Argyrotaenia pulchellana**, grapevine pests 580
- Arisaema spp.**, diseases, dasheen mosaic 2975
- Arisarum spp.**, as weeds, grapevine 1903
- Armillaria matsutake**, edible fungi 6122
- A. mellea**
 apricot diseases 63
 coffee diseases 4057
 pathogenicity tests, peach diseases 1020
 soil fumigation, grapevine diseases 7573
- Arnica spp.**, essential oil 1424
- Arnica spp.**, essential oil, composition 2353-2354
- Aronia melanocarpa**
 cold, protection 7487
 fruit, vitamin P, content 7487
 growing, USSR 7487
- Arsenic**
 absorption, eggplant 2851
 determination, neutron activation analysis, tea 4108
 fruit, acidity, reduction, calamondin 4021
 residues
 fruit 3329
 strawberry 2704
 tea 3329
 vegetables 3329
 translocation, eggplant 2851
- Artemisia spp.**
 carbon cycle 6319
 diseases, *Rhizoctonia* spp. 336
 essential oil 329
 composition 329
 flavonoids 6286
 terpenes 7966
 water, flow 2369
- Artichoke, globe**
 annual report, Cyprus 3604
 breeding and selection, annual report, Italy 6771
 cynarin 4400
 determination 3637
 growing, Italy 4399
 irradiation, ionizing, injury 604
 organic acids 4400
 planting, spacing 3632
 weed control 3633
- Artichoke, globe, diseases**
Botrytis cinerea, irradiation, ionizing 604
 yellow band 3634
- Artichoke, globe, flower**
 bud development, growth substances, GA 3636
 maturity, growth substances, GA 3636
- Artichoke, globe, growth substances**
 flower, maturity, GA 3636
- Artichoke, globe, growth substances** *contd.*
 flower bud, development, GA 3636
 responses, GA 3632
- Artichoke, globe, pests**
Brachycaudus helichrysi, control 5905
Capitophorus horni
 biological control
 fungi 3635
 Hymenoptera 3635
Spodoptera littoralis, control 5905
- Artichoke, jerusalem**
 antibiotics, enzymes, biosynthesis, actinomycin D, tissue culture 3630
 enzyme activity
 inhibition 1305
 tuber slices, tissue culture 130
 enzymes
 biosynthesis, tissue culture 3630
 tuber 8598
 nucleic acids
 biosynthesis, report, Australia 3602
 extraction 4398
 respiration
 tuber
 growth substances 8599
 tissue culture 8599
 temperature, dormancy, breaking 2749
 tissue culture
 annual report, UK 1938
 tuber 6786
 amino acids, metabolism 7620
 growth substances 8599
 treatment 8597
 phytochrome, metabolism 7620
 root development 8600
 temperature 8597
 xylem, formation 3631
 tuber slices 131
 weed controlled by, *Cynodon dactylon* 4397
- Artichoke, jerusalem, growth substances**
 dormancy, breaking, GA 2749
 interaction
 temperature
 GA, tissue culture 8597
 NAA, tissue culture 8597
 respiration
 tuber
 2,4-D 8599
 GA 8599
 kinetin 8599
- Artichoke, jerusalem, tuber**
 dormancy
 breaking
 growth substances 2749
 temperature 2749
 ribosomes 5175
 formation, ribosomes 5175
 sprouting, ribosomes 5175
 sterols, biosynthesis, tissue culture 1960
- Artipus floridanus**, citrus pests, annual report, USA 8051
- Artocarpus spp.**, cytology 1378
- Arum spp.**, as weeds, grapevine 1903
- Arvicola terrestris**
 control
 fruit trees and plants, pests 8306
 vegetables, pests 8306
- Aschersonia spp.**, fungal parasite, *Dialeurodes citri*, citrus 8081
- Asclepias spp.**
 flowering, temperature 7952
 growth substances, retardants, aminozide 7952
 temperature, flowering 7952
- Ascochyta chrysanthemi**, chrysanthemum diseases, annual report, USA 8834
- A. clematidina**, clematis diseases 3929
- A. coffeae**, coffee diseases 3203
- A. melonis**, cucumber and gherkin diseases 621
- A. necans**
 ferns, diseases, annual report, USA 8834
Polystichum spp., diseases 1377
- A. spp.**
 heat treatment, papaw diseases 8171
 post-harvest dips, papaw diseases 8171
- Ascogaster quadridentata**, parasite of, *Grapholitha funebrana*, plum 6660
- Ascorbic acid**
 applied
 bud development, pea 220
 cuttings, apple 2544

Ascorbic acid *contd.*applied *contd.*

- enzyme activity, mustard 3013
- fruit
 - loosening
 - apple 975
 - cherry 8445
- interaction, growth substances, petunia 6152
- leaf, senescence, eggplant 671
- onion 233
- seed, *Rosa* spp. 2990
- biosynthesis, seed treatment, *Rosa* spp. 2990
- content
 - boron nutrition, spinach 126
 - citrus 3158
 - coloured light, orange 7149
 - diseased fruit, tomato 2891
 - flower bud, frost resistance, cherry 2627
 - fruit 1050
 - avocado 789
 - black currant 2674
 - annual report, UK 7489
 - chinese gooseberry 1047
 - climate 6334
 - coffee 8158
 - disease resistance, apple 5736
 - disorders, orange 2414
 - fertilizers, algae, tomato 6098
 - geographical location, apple 6600
 - growth substances, tomato 6094
 - Hippophae* spp. 6238
 - iron nutrition, orange 8075
 - latitude, apple 7417
 - mutagens, tomato 7769
 - nitrogen nutrition, apple 8378, 8415
 - Phoma destructiva*, tomato 6106
 - phosphorus nutrition, mandarin and tangerine 8072
 - Phytophthora citrophthora*, lemon 6347
 - plant nutrition
 - mandarin and tangerine 7158
 - raspberry 6682
 - plant nutrition capsicum 6893
 - pollination, apple 973
 - Rhizopus arrhizus*, apricot 2616
 - ripening
 - banana 8127-8128
 - capsicum 7765
 - tomato 8806
 - rootstocks, guava 5626
 - seasonal variations, lime (*Citrus*) 8101
 - size, lime (*Citrus*) 8101
 - Sorbus aucuparia* 2665
 - spray concentration, apple 2585
 - storage
 - apple 985
 - mandarin and tangerine 7153
 - natsudaidai 6360
 - varietal differences
 - apple 4228, 7416-7417
 - black currant 8488
 - capsicum 7765
 - cherry 3451
 - pear 7416
 - tomato 1303, 5362, 5369
 - zinc nutrition, apple 5011
 - gamma rays, cabbage 5921
 - grapevine 594
 - humic acid
 - cucumber and gherkin 684
 - tomato 684
 - irradiation, ionizing, post-harvest, mango 1595
 - latitude, lettuce 5678
 - leaf
 - fertilizers, algae, tomato 6098
 - light intensity, peach, pear 3491
 - spice plants 4728
 - Vaccinium* spp. 1869
 - light, intensity, spinach 607
 - manganese nutrition, spinach 126
 - mango 5633
 - molybdenum nutrition, lettuce 7630
 - mother-plant treatment, turnip 1178
 - nitrogen nutrition
 - lemon 3113
 - soilless culture
 - capsicum fruit 2845

Ascorbic acid *contd.*content *contd.*

- nitrogen nutrition *contd.*
- soilless culture *contd.*
- tomato fruit 2845
- spinach 2903
- vegetables 119
- NPK nutrition, peach 6629
- nutrition
 - cabbage 143
 - melon (cantaloup and musk) 165
- Penicillium oxalicum*, *Phyllanthus emblica* 7274
- plant, soil types, absinth 6246
- potassium, lemon 3113
- potassium nutrition, tomato 2869
- processing
 - raspberry 112
 - strawberry 112
- root, beetroot 5172
- seed, coffee 8158
- storage
 - citrus 5573
 - vegetables 3670
- tropical spinach 6119
- tuber, kohlrabi 6799
- varietal differences
 - cabbage, chinese 3663
 - tomato 2890
 - vegetables 3339
- degradation, storage, lettuce 7636
- determination, vegetables 5901
- metabolism, fruit, citron 8096
- Ascotis selenaria*
 - coffee pests 6407
- fungicides, fentin hydroxide, coffee pests 3205
- parasites
 - Afromelanichneumon sporadicus*, coffee pests 1584
 - Cryptus nigropictus*, coffee pests 1584
- Asparagus**
 - annual report
 - Belgium 4363
 - Cyprus 3604
 - German Federal Republic 7598, 8579
 - Netherlands 1132, 5151, 6772
 - UK 3612-3613
 - USA 1130, 3616, 7601
 - carbon dioxide injury 6782
 - enzyme activity
 - nutrient deficiency diagnosis 1145
 - shoot, tissue culture 6020
 - growth studies 5293
 - herbicides, injury 2827
 - organic acids 6783
 - planting
 - seedlings in gaps in direct sown beds 2077
 - spacing 2076
 - seedling, planting 2077
 - storage, temperature 5821
 - tissue culture
 - anther, growth substances, treatment 8735
 - leaf cells, callus formation 8734
 - meristem, annual report, Belgium 1131
 - shoot, enzyme activity 6020
 - stem
 - growth substances, treatment 2080
 - media 2080
 - weed control 2078, 2827-2828, 5291, 5680
 - annual report, New Zealand 5152
 - review 5292
- Asparagus diseases**
 - Botrytis cinerea*, control 8733
 - Fusarium oxysporum*, 659
 - F. redolens* 659
 - F. spp.*, incidence 2079
- Asparagus growth substances**, endogenous, shoot 4517
- Asparagus nutrition** 2826
- Asparagus, ornamental**
 - annual report, Netherlands 6126
 - economics, Denmark 3899
 - growing
 - annual report, Irish Republic 2909
 - Denmark 4675
 - harvesting 2268
 - labour requirements 2268
 - Denmark 3899

Asparagus, ornamental *contd.*

- nutrition
 - calcium 3898
 - magnesium 3898
 - potassium 3898
- planting, spacing 2268
- soilless culture 306
- Asparagus seed**
 - sowing
 - direct 2826
 - spacing 2826
 - sugars, content 8883
- Asparagus soil**
 - management, methods compared 2828
 - sickness 3755
 - structure, old roots 3755
- Asparagus spear**, proteins, content 4941
- Asparagus varieties**
 - annual report, Sarawak 3609
 - comparative trials, Finland 6019
 - disease resistance, *Fusarium* spp., annual report, Australia 5882
 - German Federal Republic 2075
 - Huchels Leistungsauslese 1243
 - Schwetzingen Meisterschuss 1243
- Aspergillus amstelodami**, grapevine diseases 579
- A. flavus**
 - extracts, virus, inhibition, bean (*Phaseolus*) 4473
 - fungus parasite, *Cydia pomonella*, apple 1768, 8396
 - symptoms, bean (*Phaseolus*) diseases 7706
- A. fumigatus**, grapevine diseases 579
- A. niger**
 - apple diseases 2601
 - leaf, micro-organisms, ozone, bean (*Phaseolus*) 6839
 - loquat diseases 4820
- A. ruber**
 - pea diseases 6860
 - seed, germination, pea diseases 1226
- A. spp.**, eggplant diseases 1274
- A. varicolor**, host organic acids, biosynthesis, litchi diseases 8110
- A. violaceo-fuscus**, grapevine diseases 7574
- A. wentii**, chrysanthemum diseases, annual report, USA 8834
- Asphodelus spp.**
 - composition 3023
 - glycosides 3023
- Asphondylia cyamopsii**, varietal resistance, *Cyamopsis tetragonoloba*, pests 3727
- A. spp.**, *Cyamopsis tetragonoloba* pests 5269
- Aspidiotus destructor**, coconut pests, annual report, Sri Lanka 7185
- A. hederæ**
 - biological control, avocado pests 3983
 - parasites, *Aphytis melinus*, citrus pests 1492
- A. spinosus**, biological control, avocado pests 3983
- Aspidiotus pests**, *Eutetranychus buxi*, chlorophyll degradation 741
- Aster, china**
 - breeding and selection, disease resistance, *Fusarium* spp., annual report, USA 1441
 - classification 4638
 - flavonoids, taxonomy 3857
 - herbicides, responses 8852
 - taxonomy, flavonoids, content 3857
 - weed control 8852
- Aster, china, diseases**
 - Alternaria tenuissima* 6993
 - Fusarium oxysporum*
 - f. *calistephi*, varietal resistance 2212
 - soil, fumigation 2206
 - varietal resistance 6159
- Aster, china diseases**, legume little leaf, control 278
- Aster, china, nutrition**, phosphorus 6133
- Aster, china, pests**
 - Aphelenchoides blastophthorus* 3858
 - A. ritzeana-bosi* 3858
- Aster, china, seed**, sowing, peat 7606
- Aster, china, soil**, fumigation, *Fusarium oxysporum* 2206
- Aster, china, varieties**
 - comparative trials, annual report, USA 8834

Subject Index

- Aster, china, varieties** *contd.*
 disease resistance
 Fusarium oxysporum. 6159
 f. callistephi 2212
- Aster flower**, cut, preservatives, vase life 4611
- Aster spp.**
 diseases
 Erysiphe cichoracearum, varietal resistance 6992
 Verticillium vilmorinii, varietal resistance 6992
 flavonoids
 content 1431
 taxonomy 3857
 nutrition, nitrogen, disease resistance 6992
 taxonomy, flavonoids, content 3857
 varieties
 disease resistance
 Erysiphe cichoracearum 6992
 Verticillium vilmorinii 6992
 winter hardiness 6992
- Astilbe flower**, cut, preservatives, vase life 4611
- Astrothrips parvilibus**, varietal resistance, banana pests 381
- Asystasia gangetica**, ground cover plants, growth retardants 6157
- Atalantia monophylla**, essential oil, fungicidal properties 6256
- Athalia proxima**, radish pests 619
- Atrichopogon spp.**, pollinator, cacao 5612
- Atriplex hortensis**, leaf, organic acids, content 8594
- A. spp.**, soilless culture 4379
- Atropa belladonna**
 alkaloids
 biosynthesis, growth substances 8002
 content, growth substances 7100
 determination 3060–3061, 3965
 production, tissue culture 6287
 chlorophyll, biosynthesis, growth substances 8002
 growth substances
 alkaloids
 biosynthesis, GA 8002
 content, GA 7100
 chlorophyll, biosynthesis, GA 8002
 responses, GA 7100
 tissue culture
 alkaloids, production 6287
 cell suspension, fatty acids, metabolism 8591
 pollen 9022
 root, media 6287
- A. spp.**
 alkaloids 6289
 content, ultra-violet light 6288
 light
 ultra-violet
 alkaloids, content 6288
 seed, treatment, alkaloids, content 6288
 seed, treatment, light, ultra-violet, alkaloids, content 6288
- Aulacaspis tegalensis**
 control, cultural methods, sugar cane pests 8237
 East Africa, survey, sugar cane pests 8220
 sugar cane pests 9256
- Aulacophora foveicollis**, varietal resistance, cucurbits, pests 1194
- Aulacorthum solani**, virus, vectors, *Rubus* viruses, raspberry 4317
- Australia**
 essential oil plants 4737
 tea, growing 9269
- Autographa californica**, lettuce pests 1158
- Avena spp.**
 as weeds
 citrus 6338
 vegetables, annual report, German Federal Republic 7598
- Averrhoa carambola**
 flower, biology 9283
 fruit
 development 9283
 set 9283
 pollination 9283
- Averrhoa contd.**
- A. spp.**
 diseases, *Colletotrichum gloeosporioides* 859
 growing, USA 1531
- Avocado**
 annual report
 Australia 9068
 St. Lucia 8056
 USA 2375, 8051
 anthocyanins, annual report, Trinidad and Tobago 9136
 breeding and selection, report, USA 6324
 enzyme activity, fruit, ripening 358
 essential oil, composition 3094
 ethylene, production, fruit, storage 1505
 fatty acid, metabolism 9072
 frost, protection, temperature data 6335
 growing
 Cameroon 3982
 Cyprus, annual report 3980
 Venezuela 8119
 harvesting, methods compared 9073
 herbicides, injury, aminotriazole 7121
 irradiation
 gamma rays
 fruit
 ethylene, production 1462
 respiration 1462
 ripening 1462
 irrigation
 drip 2376
 salinity problems 2376
 sprinkler 2376
 manganese
 absorption, phosphorus nutrition 8055
 content
 leaf
 soil fumigation 8055
 soil steaming 8055
 phosphorus
 absorption
 soil fumigation 8055
 soil steaming 8055
 respiration
 fruit 1465
 gamma rays 1462
 storage, temperature 9073
 seed 1465
 ringing 8057
 storage
 controlled atmosphere
 chilling injury 1505
 ethylene removal 1464
 temperature, respiration 9073
 water loss 3177
 weed control 1946, 6325, 7121
- Avocado diseases**
Botryodiplodia spp., Venezuela 9071
Colletotrichum gloeosporioides 1464, 2377
 control, review 5540
 decline 3092
Fusarium spp., incidence 6327
Phytophthora cinnamomi, Venezuela 9071
 sunblotch, rootstock-scion relationships 9070
 Venezuela 8053
Verticillium albo-atrum 7122
- Avocado flower**
 biology, abnormal, Corsica 5543
 classification 4785
- Avocado fruit**
 aroma 7171
 ascorbic acid, content 789
 composition 3094, 3982
 varietal differences 359
 development, growth substances, endogenous 2378
 fatty acids 4784
 flavour 1460, 3094
 growth substances, endogenous 3093
 irradiation
 gamma rays
 post-harvest
 ethylene, production 1462
 respiration 1462
 storage life 2435
 oil, content 789
 proteins, content 789
 respiration 1465
- Avocado fruit contd.**
 respiration *contd.*
 gamma rays 1462
 ripening 789
 enzyme activity 358
 gamma rays 1462
 storage, temperature 9073
 water loss, storage 3177
 water loss, storage 3177
- Avocado growth substances**
 endogenous
 determination 2378
 fruit 2378, 3093
 seed 9069
 growth inhibition
 NIA-10637 4783
 NIA-10656 4783
- Avocado nutrition**
 phosphorus
 manganese absorption 8055
 soil fumigation injury 8055
- Avocado pests**
Abgrallaspis cyanophylli, biological control 3983
Aonidiella aurantii, biological control 3983
Aspidiotus hederae, biological control 3983
A. spinosus, biological control 3983
Chrysomphalus aonidum, biological control 3983
Copturomimus perseae, varietal resistance 8052
Fiorinia florinae, biological control 3983
Hemiberlesia lataniae, biological control 3983
Stenoma catenifer, varietal resistance 8052
 Venezuela 8053
Xylosandrus morigerus
 alternative hosts
 coffee 8154
 Salix humboldtiana 8154
- Avocado plant**, development 1463
- Avocado propagation**
 air-layering, time of 8054
 grafting, annual report, Tunisia 3981
- Avocado rootstocks**
 -scion relationships
 incompatibility 5542, 9070
 union
 anatomy 5542
 virus incidence 9070
 virus incidence 9070
- Avocado seed**
 germination
 growth substances 9069
 metabolic processes 9069
 respiration 1465
- Avocado soil**
 fumigation
 injury 8055
 manganese, content, leaf 8055
 phosphorus absorption 8055
 salinity, irrigation 2376
 steaming, phosphorus absorption 8055
- Avocado varieties** 6409
 Australia 7120
 classification 4785
 Colombia 1461, 8052
 evaluation, Florida 5627
 flowering, date 4785
 Nabal, carotenoids 3095
 pest resistance
 Copturomimus perseae 8052
 Stenoma catenifer 8052
 Venezuela 8053
- Axonopus spp.**
 as weeds
 cacao 8134
 rubber 4881, 9210 7226
 tea 4106
- Azalea**
 annual report
 Austria 265
 Belgium 5386, 8835
 Netherlands 4604, 6126
 USA 3835, 8834
 breeding and selection, pendant forms 4701
 dwarfing, growth substances 4702
 flowering, growth substances 4702, 7944

Azalea contd.

- frost, injury, shoot, ice formation 5019
growing
 in containers, weed control 4614
 media, coal ash 8857
 peat, nutrition 746
 as pot plants 2285, 4700, 5469
 in pots, transport 2278
herbicides
 injury
 dichlobenil 2986, 4614
 EPTC 2986, 4614
humidity, relative, disease incidence 6225
moss control, nurseries 743
pinching
 chemical 7043
 humidity 7043
 temperature 7043
pots, types compared 6222
potting composts
 Hygromull 7942
 pine leaf-mould 7942
 porosity 6222
pruning and training
 chemical 7045
 equipment 2286
 growth substances 7044
 Off-Shoot-O 2286
 mechanical, hedge clipper 2286
report, USA 6130
temperature 2289
 disease incidence 6225
 flower, development 2289
 flower bud, initiation 2289
weed control 2986, 4614

Azalea bud, initiation, annual report, UK 4605**Azalea diseases**

- Calonectria theae* 2287
 varietal resistance 7943
Cylindrocylindrium scoparium 2287
 annual report, Netherlands 6961
 host nutrition 6225
 relative humidity 6225
 temperature 6225
 varietal resistance 7943
Ovulinia azaleae, annual report, Australia 5385
Pestalotia guepini 7046
Pestalotiopsis versicolor
 host nutrition 6225
 relative humidity 6225
 temperature 6225
Phytophthora cinnamomi
 host nutrition 6225
 relative humidity 6225
 temperature 6225
Rhizoctonia solani
 host nutrition 2987, 6225
 relative humidity 6225
 temperature 6225

Azalea flower

- bud initiation
 nutrition 745
 temperature 2289
bud necrosis 7043
development, temperature 2289

Azalea growth substances

- application, adjuvants, oil 6978
dwarfing, aminozide, CBBP, PPA, CTBP, ancymidol, phosphon 4702
flowering
 aminozide 7944
 CBBP, PPA, CTBP, ancymidol, phosphon 4702
 chlormequat 7944
 DMC 7944
 F529 7944

leaf

- abscission, fatty acid methyl esters 7044
 injury, fatty acid methyl esters 7044
 pinching, fatty acid methyl esters 7044
 pruning, fatty acid methyl esters 7044
 residues, chlormequat 7944
retardants
 aminozide 7944
 chlormequat 7944
 DMC 7944
 F529 7944

Azalea leaf, colour, nutrition 745**Azalea nutrition 746**

- fertilizers, slow-release 6224

Azalea nutrition contd.

- general, disease incidence 2987
major elements, leaf analysis 745
NPK 745
 disease incidence 6225

Azalea pests

- Tylenchorhynchus christiei* 2288
T. claytoni 2288

Azalea propagation

- cuttings
 annual report, Irish Republic 2909
 media 3838, 8845
 under plastic 3917
 source plants
 nutrition 6221
 photoperiodism 6221
 temperature 6221
 storage 6221

Azalea varieties

- disease resistance
 Calonectria theae 7943
 Cylindrocylindrium scoparium 7943

Babiana spp.

- seed
 composition 2943
 oil 2943

Bacillus mesentericum, stone fruits, diseases 6609**B. thuringensis 447****B. thuringiensis**

- pest control
 annual report, German Federal Republic 6506
 Desmia funeralis, grapevine 1922
 Mythimna phaea, sugar cane 8234
 Pieris rapae
 cabbage 1172, 4427, 7657
 annual report, Canada 2734
 Plutella maculipennis, cabbage 6798
 P. xylostella, cabbage 4427
 Spodoptera frugiperda, cabbage 4427
 Trichoplusia ni
 cabbage 1172, 4427, 7657
 lettuce 5913
 watermelon 6824
 Trichoplusia ni, cabbage, annual report, USA 8585

Bacopa monniera, sapogenins 8008**Bacteria**

- medicinal properties, survey 775
vectors
 Minettia spp., *Erwinia amylovora*, pear 5787
 Pegomya spp., *Erwinia amylovora*, pear 5787

Bactericides

- streptomycin
 absorption, vegetables 6849
 application
 adjuvants, vegetables 6849
 surfactants, vegetables 6849
 resistance, *Erwinia amylovora*, pear 5787
 translocation, vegetables 6849

Bacterium scabiegenuum, beetroot diseases 7614**B. tumefaciens, tissue culture, hollyhock diseases 726****B. tumefaciens, pecan diseases, annual report, USA 451****Balanites aegyptiaca**

- glycosides 3087
sapogenins
 content
 fruit 9023
 seed 9023

Balduina spp., plant, composition, angustibalin 4759**Bamboo, as a windbreak, citrus 1473****Banana**

- annual report
 Australia 1529, 5600, 9121
 India 4034
 Rhodesia 4829
 Sri Lanka 3171
 Western Samoa 8122
carbohydrates
 metabolism 9134
 irradiation, gamma rays, post-harvest 6390
climate, microclimate, irrigation 4037
clones
 classification 9127

Banana contd.

- clones contd.
 Venezuela 9127
drying 22
economics, Cameroon 824
enzyme activity
 fruit, ripening 7176
 plant, carbohydrates, metabolism 9134
enzymes
 fruit
 irradiation 6390
 ripening 6389
 plant 9134
ethylene, fruit, ripening 3178, 4045
fungicides
 injury, oils 1542
 residues
 determination
 folpet, captan, captafol 2505
 quintozene 3331
 thiabendazole 7156
 benomyl 6501
 fruit, thiabendazole 7156
growing
 book 7175
 for harvesting throughout the year 1538
 India 4832
 as an intercrop
 coconut, annual report, Jamaica 4851
 rubber 8178
 Israel 1536
 Portuguese East Africa 8125
 Venezuela 8119
growth, studies 1539
harvesting, time of, fruit, ripening 3178
herbicides
 injury
 bromacil 9129
 terbacil 9129
irrigation 4038
 economics, Cameroon 4038
 equipment 4039
 flood
 air temperature 4037
 soil temperature 4037
 requirements 9130
 sprinkler
 air temperature 4037
 soil temperature 4037
light, artificial, fruit, ripening 4836
net assimilation rate 1539
phyllotaxy 8123
planting
 spacing, plant nutrition 7173
 time 1538
potassium, content, leaf 5603
processing 1538
production and trade, Cameroon 5601
respiration
 ethylene, production 383
 fruit 1544
 storage 3179
 water relations 3179
statistical, sampling, leaf 9131
sterols, metabolism 4042
storage
 controlled atmosphere
 fruit, composition 1544, 8128
 hypobaric system 1705
 diseases, control 9106
 growth substances
 2,4-D 2438
 GA 2438
 smoking treatment 5606
 temperature 2439
 fruit
 colour 2440
 composition 2440
 ripening 2440
 water loss 3177
 wax coatings 4044, 5606
sucker, removal, growth responses 1539
taxonomy 9127
weed control 9129
 review 378, 8121

Banana diseases

- Alternaria musae* 4833
book 7175
Botryodiplodia theobromae 1546
bunchy top, vectors, *Pentalonia nigronervosa* 9132

Banana diseases *contd.*

- Cercospora musae* 1542
 - forecasting 6386
- Fusarium oxysporum*, f. *cubense*, incidence 5604
- F. roseum* 1541
- F. spp.*, incidence 6327
- Gloeosporium musarum* 829, 1541, 1546, 4833
- Mycosphaerella fijiensis* 4834
- Mycosphaerella musicola* 379, 4834
- M. spp.*, varietal resistance 1540
- oil spot 1541
- Phyllachora musicola*, varietal resistance 1540
- Phytophthora palmivora* 830
- Stachyldium theobromae* 1541
- storage diseases, control 9106
- Uromyces musae*, varietal resistance 1540

Banana disorders, yellow pulp, sulphur deficiency 825**Banana flower**

- bud initiation, nitrogen nutrition 4041
- development, nitrogen nutrition 4041
- morphology 9128

Banana fruit

- aroma 7171
- ascorbic acid, content, ripening, storage 8128
- browning, enzyme activity 1545
- colour
 - growth substances 2440
 - 2,4-D 2439
 - 2,4,5-T 2439–2440
 - storage, temperature 2440
- composition 2440, 8130
- growth substances
 - 2,4-D 2438
 - GA 2438
- organic acids 1544
- ripening 7176, 8127
- development 1539
- flavour
 - evaluation, methods 4837
 - storage, temperature 2440
- irradiation
 - gamma rays
 - carbohydrates, metabolism 6390
 - post-harvest, storage life 2435, 4043
 - organic acids, content, ripening 8126
 - pectins, content, ripening, storage 8128
- proteins
 - content 4941
 - determination 8129
- quality 8130
 - evaluation, methods 4837
- ripening 3178
 - amino acids, content 5607
 - ascorbic acid, content 8128
 - composition 7176, 8127
 - enzyme activity 7176
 - enzymes, content 6389
 - ethylene 3178
 - growth substances
 - 2,4-D 2438–2439
 - ethephon 4045
 - GA 2438
 - 2,4,5-T 2439
 - irradiation
 - gamma rays 4043
 - ionizing 604
 - light 4836
 - organic acids, content 8126
 - pectins, content 8128
 - propylene treatment 383
 - storage 1544
 - temperature 2440
 - volatile compounds, production 2441
 - water loss, storage 3177
- shape
 - growth substances
 - 2,4-D 2439
 - 2,4,5-T 2439
 - storage, dips 1546
 - texture 8130
 - vitamins 3339
 - water loss, storage 3177
 - water relations, respiration 3179

Banana growth substances

- fruit
 - colour
 - 2,4-D 2439–2440

Banana growth substances *contd.*

- fruit *contd.*
 - colour *contd.*
 - 2,4,5-T 2439–2440
 - composition
 - 2,4-D 2438
 - GA 2438
 - ripening
 - 2,4-D 2438–2439
 - ethephon 4045
 - GA 2438
 - 2,4,5-T 2439
 - shape
 - 2,4-D 2439
 - 2,4,5-T 2439
 - storage
 - 2,4-D 2438
 - GA 2438

Banana leaf

- area 1539
- growth, studies 1539
- nitrogen, content, pseudostem, girth 4041

Banana nutrition 864, 4040

- calcium, leaf analysis 9131
- chlorine, leaf analysis 9131
- magnesium
 - leaf analysis 9131
 - soil analysis 7174
- nitrogen
 - flower bud
 - development 4041
 - initiation 4041
 - pseudostem, girth 4041
- NPK, planting, spacing 7173
- potassium 6385
 - deficiency 6385
 - leaf analysis 9131
 - soil analysis 7174
 - plant analysis 9131
- sodium, leaf analysis 9131
- sulphur
 - deficiency 825
 - review 825

Banana pests 1696

- Aphis gossypii*, disease relationships 4833
- Astrothrips parvilibus*, varietal resistance 381
- birds, control, review 4830
- Calacarus citrifolii* 6388
- Colaspis hyptochlora* 380
- Cosmopolites sordidus* 380
- Helicotylenchus* spp.
 - heat treatment 5605
 - rhizome dips 5605
- Hercinothrips bicinctus* 4835
- insects, control, review 1532
- Nacoleia octosema* 380
- nematodes 446, 828, 1543
- Nodostoma subcostatum* 380
- Odoiporus longicollis* 380
- Pentalonia nigronervosa* 380, 5489
 - vectors, bunchy top 9132
- Pratylenchus* spp.
 - heat treatment 5605
 - rhizome dips 5605
- Radopholus similis* 827
 - alternative hosts 7608
 - control 9133
 - pest-growth correlation equation 826
 - soil treatment 6387
- R. spp.*
 - heat treatment 5605
 - rhizome dips 5605
- review, Bolivia 5671
- Scirtothrips signipennis* 380
- Tetranychus lombardii* 4835, 6388
- Thrips florum*, varietal resistance 381
- Banana plant**, composition 1539
- Banana pseudostem**, girth, nitrogen, content, leaf 4041
- Banana root**, growth, studies 1539
- Banana soil**, temperature, irrigation 4037
- Banana varieties** 1537, 5602
 - annual report, Sarawak 4036
 - disease, resistance, genetics 1540
 - flower, morphology 9128
 - pest resistance 381
 - USA 8124
- Banisteriopsis caapi*, alkaloids 7097
- Baptisia australis*, alkaloids, content 1430

Bartha brassicae, brassicas, pests, annual report, German Federal Republic 8579**Bark**

- manures, vegetables 5161
- media
 - bulb forcing 880
 - container-grown plants 1321
 - manganese toxicity 4691, 6216
- cuttings, ornamental trees and shrubs 3838
- growing plants 880
- herbs 7605
- mushroom growing 8821
- vegetables 7605
- mulch 880
- potting composts, trees and shrubs 2276
- uses, annual report, UK 6483

Basella alba

- flowering, photoperiodism 602
- growing 7823

B. rubra, growing 7823**B. spp.**, nutritional value 4387**Basil, sweet**

- bibliography 7967
- herbicides, chloroplast, structure, aminotriazole 1409
- leaf, structure 1410
- soilless culture 5487

Basil, sweet, diseases

- virus
 - chloroplast, structure 1409
 - leaf structure 1410
- Batrachedra amydraula**
 - date pests 1514
 - parasites, *Hymenobosomina* spp., date pests 1514

Bauhinia purpurea alba

- hemagglutinin content 2309
- medicinal use 2309

Bay laurel

- bibliography 7967
- essential oil 4738
 - composition 7965
 - determination 7066
- seedling, development, seed, sources 3019

Bay laurel seed

- germination, seed, storage 3019
- storage 3019

Bean (*Phaseolus*)

- air pollution
 - injury 3698
 - peroxyacetyl nitrate 2925
 - prevention, fungicides 3698
- amino acids
 - content 2037
 - herbicides 5995
 - seed 8704
- metabolism
 - enzyme activity 2029
 - leaf 5996
- annual report
 - Australia 7596
 - Austria 114
 - Belgium 1131, 4363
 - German Federal Republic 7597–7599, 8579
 - Irish Republic 1939
 - Kenya 6844
 - Malawi 8580
 - Netherlands 8581
 - UK 1934, 3611, 3613, 4365, 8584
 - USA 1130, 1935, 3616, 4367, 7601, 8585
 - Zambia 8586
- bactericides
 - absorption, translocation, streptomycin 6849
 - application, surfactants, adjuvants, streptomycin 6849
- bibliography 5971
- breeding and selection 5973, 8674
- annual report, Yugoslavia 3619
- cold, resistance, tests 2009
- disease resistance 3694
 - annual report, Australia 5882
 - Uromyces phaseoli* 2023
 - Xanthomonas phaseoli* 5248
- F₁ hybrids, annual report, USA 3617
- seed, germination at low temperatures 2784
- caesium, absorption, reduction, clinoptilolite, contaminated soils 2789

Bean (*Phaseolus*) contd.

- calcium
 - content
 - aluminium nutrition 5974
 - plant 8702
 - translocation 2028
 - temperature 2028
- carbohydrates, metabolism, drought injury 7722
- carbon monoxide, metabolism 1219
- cell
 - solute permeability, ozone 8682
 - water permeability 8695
 - ozone 8682
- chlorophyll
 - biosynthesis 7708
 - inhibition, actinomycin D 5983
 - light 4505
 - far red 7715
 - red 7715
 - red and far-red 4505
 - phytochrome 7715
 - content, ozone injury 2788
 - metabolism 7714
- chloroplast
 - development 5986, 7710
 - lipids, metabolism 2072
- climate, microclimate 640
- colchicine treatment, growth substances, content 6851
- cold, resistance, testing 2009
- cotyledons, histology, herbicides 2012
- cyanide, content 5263
- darkness
 - growth studies 5256
 - leaf, movements 5989
- drought
 - injury, flower biology 7722
 - resistance, ribosome activity 2802
- dwarfing
 - growth substances
 - aminozide 2031
 - butylammonium bromides 2031
 - chlormequat 2031
- enzyme activity 1954
- diseased plants 3708
- inhibition, prenyl pyrophosphates 2030
- inhibitors, determination 7723
- leaf 6850
 - determination 5897
- proteins, biosynthesis 4479
- root extracts 2033
- seed 192, 5992
- seedling 196
- seedlings, amino acids, metabolism 2029
- sulphur, deficiency 3717
- enzymes 2797
 - determination 8700
 - extraction 647
- ethylene
 - leaf, abscission 5259
- production
 - growth substances 4481
 - inhibition, growth substances, cycloheximide 4483
 - stress-induced 4483, 7720
 - treatment, shoot abscission 6854
- flowering, date 8675
- frost, protection, sprinkler irrigation, tunnels 2016
- fungicides
 - air pollution injury, prevention, benomyl 3698
 - application
 - spreaders, zineb 1215
 - surfactants, zineb 1215
 - injury
 - actinomycin-C 4475
 - zineb 1215
 - residues
 - determination
 - benomyl 7609
 - thiophanate 7610
 - thiophanates 4477
- glycosides, content 8705
- growing
 - Bulgaria 3620-3621
 - book 8670
 - under glass, pest control 3627
 - for harvesting throughout the year, annual report, UK 5884
 - as an intercrop, pineapple 9198

Bean (*Phaseolus*) contd.

- growing contd.
 - Malawi 8673
 - outdoor and greenhouse compared 8675
 - protected cultivation 5159
 - Tunisia 4369
 - tunnels 2016
 - plastic, annual report, UK 4366
- growth, apical dominance, growth substances 2800
- growth studies 2787
 - apical dominance 8698
 - light 7716
 - temperature 7716
 - water relations 3713
- growth studies after dark treatment 5256
- harvesting, mechanical, chemical defoliation, annual report, Irish Republic 5150
- heat treatment, fungus control, bean 8706
- herbicides
 - absorption
 - aminotriazole 6848
 - tolerance, terbutryne 4468
 - disease incidence, dinoseb 8687
 - injury
 - A-820 6777
 - alachlor 2018
 - dinoterb 8683
 - diuron 3700
 - EPTC 3660
- Bean (*phaseolus*), herbicides, injury, ethylene production, endothal 4483**
- Bean (*Phaseolus*)**
 - herbicides
 - injury
 - linuron 3700
 - nitrofen 8683
 - terbutryne 3700, 5888
 - testing 193
 - metabolism, aminotriazole 6848
 - plant
 - responses 8684
 - terbutryne 4468
 - proteins
 - biosynthesis, picloram 6855
 - content
 - s-triazine compounds 5995
 - triazines 2012
 - residues
 - plant, Dacthal 646
 - soil, Dacthal 646
 - responses 641
 - atrazine 5995
 - tolerance, terbutryne 5888
 - translocation, growth substances, naptalam 5988
 - insecticides
 - injury
 - bromophos 8692
 - carbamates 2742
 - trichloronate 8692
 - metabolism, aldrin 2033
 - residues
 - malathion 183
 - plant
 - DDE 646
 - DDT 646
 - dieldrin 646
 - endrin 646
 - lead arsenate 1951
 - toxaphene 646
 - soil
 - DDE 646
 - DDT 646
 - dieldrin 646
 - endrin 646
 - toxaphene 646
 - intercropping, maize 8673
 - iron, translocation, nutrient solution, composition 4507
 - irrigation 7700
 - annual report, Australia 1133
 - plant nutrition 5975
 - proteins, content, 5258
 - requirements, determination 171
 - sprinkler 171
 - surface 171
 - light
 - far-red
 - calcium, metabolism 7713

Bean (*Phaseolus*) contd.

- light contd.
 - far-red contd.
 - chlorophyll, biosynthesis 4505, 7715
 - leaf, development 3716
 - intensity
 - apical dominance 8698
 - leaf
 - area 3715
 - movements 5989
 - photosynthesis 2793
 - transpiration 2793
 - interaction
 - growth substances 195
 - temperature
 - growth 7716
 - photosynthesis 7716
 - leaf, senescence 4482
 - pigments 8699
 - proteins 8699
 - red
 - chlorophyll, biosynthesis 4505, 7715
 - leaf, development 3716
 - white, calcium, metabolism 7713
 - lipids, metabolism, leaf, development 2072
 - magnesium
 - content
 - aluminium nutrition 5974
 - plant 8702
 - translocation 2028
 - temperature 2028
 - mitochondria, strontium, absorption 187
 - mutants 636
 - flat pod rogue 5233
 - growth substances, endogenous 4465
 - stringy pod rogue 5232
 - nitrite, toxicity 5893
 - nitrogen, content, seed 5997
 - nucleic acids
 - biosynthesis, actinomycin D 7719
 - metabolism, etiolated leaves 5983
 - organic acids 6783
 - ozone
 - cell permeability 8682
 - injury 6840
 - leaf
 - composition, adenylates 6841
 - ethylene production 4483
 - metabolism 2015
 - photosynthesis 8681
 - respiration 1209, 8681
 - prevention
 - fungicides 1210-1211
 - benomyl 6840
 - sulphur nutrition 2788
 - potassium, metabolism, tissue culture 7711
 - phaseollin, biosynthesis, actinomycin D 7719
 - phosphorus
 - content, aluminium nutrition 5974
 - metabolism 4470
 - translocation 2028, 2796
 - temperature 2028
 - photoperiodism, nitrate accumulation 1144
 - photosynthesis 184
 - annual report, Australia 6769
 - carbon dioxide uptake 5984
 - after dark treatment 5985, 8694
 - growth substances 2799
 - inhibition, anti-transpirants 3333
 - light intensity 2025, 2793
 - oxygen concentration 2025, 7709
 - ozone 8681
 - plant nutrition 8693
 - respiration
 - leaf 7709
 - plant 188
 - temperature 5984-5985
 - toxins, fusaric acid 3712
 - transpiration 2793
 - phytoalexins
 - biosynthesis 7719, 8688
 - production 7705
 - phytochrome, -chlorophyll relationships 7715
 - pigments
 - biosynthesis, light 2026
 - content 8705
 - light 8699

Bean (*Phaseolus*) contd.

- planting
 - v. direct sown, tunnels 2016
 - spacing 2014, 2786
 - annual report, Netherlands 1135
- pollination, bees, seed production 5899
- potassium
 - content
 - aluminium nutrition 5974
 - plant 8702
 - metabolism, tissue culture 7711
 - translocation 2028
 - temperature 2028
- proteins 3723, 4484, 7724
 - biosynthesis
 - enzyme activity 196, 4479
 - herbicides 6855
 - content
 - growth substances, chlormequat 5258
 - herbicides 2012, 5995
 - irrigation 5258
 - nitrogen nutrition 3701, 5242
 - phosphorus nutrition 3701
 - potassium nutrition 3701
 - seed treatment 5242
 - varietal differences 1205
 - determination 4486
 - light 8699
 - metabolism 3722
 - seed germination 5239
 - nutrients, content, herbicides 4485
- pterocarpanoids 6233
- rainfall
 - disease incidence 2011
 - pest incidence 2011
 - plant nutrition 5975
- report, USA 1940
- research, Belgium 8672
- respiration
 - leaf
 - oxygen concentration 7709
 - ozone 1209, 8681
 - photosynthesis 7709
 - toxins, fusicoccin 3712
 - plant, photosynthesis 188
 - wind 5254
- ribosome activity, drought, resistance 2802
- ribosomes
 - diseased plants 8701
 - senescence 8701
- salinity, damage, leaf senescence 2879, 5244
- seedling
 - chlorophyll, biosynthesis 186
 - emergence, soil compaction 5238
 - growth, haemagglutinin, treatment 2798
 - treatment, dark, growth studies 5256
- sodium
 - translocation 2028
 - temperature 2028
- soilless culture, nutrient solution, concentration 5979
- statistical, design of trials, plot size 7695
- sterols
 - content 2034
 - metabolism, plant cell membranes 2034
- stomata, number, light, intensity 3715
- storage
 - cold, ascorbic acid, content 3670
 - methods compared 2036
- strontium, absorption, reduction, clinoptilolite, contaminated soils 2789
- sugars
 - content 2038
 - boron nutrition 3710
 - seed 5997
 - metabolism, tissue culture 2805
 - translocation 2795
 - phloem blockage 5987
 - temperature 5987
- symposium 8671
- taxonomy, chemotaxonomy 6233
- temperature 2787
 - interaction
 - light
 - growth 7716
 - photosynthesis 7716
 - nutrient translocation 2028
 - photosynthesis 5984

Bean (*Phaseolus*) contd.

- temperature contd.
 - sums 2787
 - tissue culture
 - cell suspension
 - fatty acids, metabolism 8591
 - sugars, metabolism 2805
 - embryo, growth substances, metabolism 2803–2804
 - leaf
 - potassium
 - absorption 8697
 - metabolism 7711
 - rubidium, absorption 8697
 - sodium, absorption 8697
 - leaf abscission layer, ethylene treatment 5259
 - seed, enzyme activity 5992
 - transpiration
 - antitranspirants 3333
 - evapo-, seasonal variations 5354
 - light intensity 2793
 - mechanism 8695
 - photosynthesis 2793
 - toxins, fusicoccin 3712, 4478
 - types
 - breeding and selection 8674
 - classification 8674
 - vitamin B
 - applied, growth substances, injury prevention 7717
 - content, growth substances 7717
 - vitamins, content 3339
 - water relations 2794
 - apical dominance 8698
 - growth studies 3713
 - root 1223
 - salinity 2790
 - seed 192
 - wax, removal, leaf, herbicides 8684
 - weed control 167, 170, 641, 1946–1948, 2017, 3615, 3699–3700, 5680, 6777–6778, 6780, 6842, 7702, 8588, 8683–8684
 - annual report
 - Cyprus 3604
 - New Zealand 5152
 - UK 5885, 5853
 - review 5270
 - Solanum nigrum* 7702
 - weeds 6491
 - wind, respiration 5254
 - zinc, toxicity, symptoms 7704
- Bean (*Phaseolus*) diseases**
- alfalfa mosaic, varietal resistance 3703
 - Alternaria* spp., control 8690
 - Aspergillus flavus*, symptoms 7706
 - bean pod mottle virus 2020
 - Cercospora* spp., control 8690
 - chlorophyll relationship 174
 - Choanephora cucurbitarum* 5249
 - Colletotrichum lindemuthianum*
 - host-pathogen relationships 3706
 - host proteins, metabolism 3705
 - incidence, Brazil 5235
 - resistance 5981
 - seed-borne 5982
 - varietal resistance 3695
 - C. spp.*, control 8690
 - common mosaic 6835
 - varietal resistance 6835
 - common mosaic virus 2021
 - Corynebacterium flaccumfaciens* 1213
 - seed germination 8677
 - varietal resistance 1205
 - Erwinia carotovora*, seed germination 8677
 - E. phytophthora*, seed germination 8677
 - Erysiphe polygoni*, seed treatment 6847
 - Fusarium oxysporum*, seed-borne 5982
 - F. solani* 5241
 - f *phaseoli*, soil, compaction 181
 - symptoms 7706
 - Iran 8707
 - Isariopsis* spp., control 8690
 - Macrophomina phaseoli* 5250
 - seed-borne 5982
 - mosaic, detection 3704
 - mosaic-type virus 2791
 - mosaic virus, varietal resistance 1212
 - Olipidium brassicae*, vectors, tobacco necrosis 8651
 - pea mild mosaic 4502

Bean (*Phaseolus*) diseases contd.

- Phyllosticta phaseolina*, symptoms 7706
 - Pseudomonas fluorescens* 5247
 - P. mors-prunorum*, phytoalexins, production 7705
 - Pseudomonas phaseolicola* 178, 2022, 5246
 - enzyme activity, inhibition 177
 - phytoalexins, production 7705
 - races 8686
 - seed germination 8677
 - toxins 176
 - varietal resistance 168
 - P. solanacearum*
 - seed germination 8677
 - varietal resistance 1205
 - Pythium aphanidermatum* 4475
 - P. butleri*, post-harvest dips 8706
 - Ramularia phaseoli* 4474
 - Rhizoctonia solani*
 - herbicides 8687
 - phytoalexins 8688
 - seed-borne 5982
 - rugose mosaic
 - vectors
 - Ceratomyces ruficornis* 6845
 - Diabrotica* spp. 6845
 - Sclerotinia sclerotiorum* 644, 1214
 - control 7707
 - forecasting 7707
 - incidence 7707
 - post-harvest dips 8706
 - Sclerotium rolfsii*, incidence, Brazil 5235
 - southern bean mosaic virus, control 175
 - soybean mosaic, control, cross protection, by bean pod mottle 4472
 - subterranean clover stunt, vectors 6846
 - Thielaviopsis basicola* 5255
 - tobacco mosaic, inhibition, fungus
 - extracts, *Aspergillus flavus* 4473
 - tobacco necrosis 8651
 - tobacco ringspot
 - host reactions 5980
 - report, Australia 3602
 - tomato mosaic virus, inhibition, plant
 - extracts, *Datura* spp. 642
 - Uromyces appendiculatus* 4474
 - annual report, East African community 5245
 - fungicides, application, adjuvants 1215
 - host histology 8689
 - U. phaseoli* 3707
 - control 8690
 - dark treatment 5251
 - heat treatment 5251
 - host-pathogen relationships 4476
 - resistance 2023, 2792
 - varietal resistance 3708
 - U. phaseoli-typica* 643
 - U. phaseoli typica*, incidence, Brazil 5235
 - virus, annual report, Netherlands 6772
 - white clover mosaic, ribosomes 8701
 - Xanthomonas campestris* 5247
- Bean (*Phaseolus*) diseases, *Xanthomonas phaseoli* 180**
- Bean (*Phaseolus*) diseases**
- Xanthomonas phaseoli* 1213, 4474, 5247
 - aerial survey 179
 - resistance 5248
 - seed germination 8677
 - varietal resistance 5234, 7696
 - X. vesicatoria* 5247
 - yellow mosaic 6835
 - vectors 6846
- Bean (*Phaseolus*) flower, biology, drought injury 7722**
- Bean (*Phaseolus*) fruit, composition 2010**
- Bean (*Phaseolus*) growth substances**
- absorption
 - foliar, 2,4-D 2032
 - IAA 8696
 - root, IAA 3714
 - SADH 1218
 - apical dominance
 - GA 195
 - IAA 195
 - kinetin 195
 - morphactin 2800
 - TIBA 2800
 - chlorine, absorption, kinetin 2027
 - chlorophyll, content, leaf, cytokinin active compounds 2799

Bean (*Phaseolus*) growth substances contd.

- cuttings
 - treatment
 - IAA 3721, 6853
 - malformin 3721
- dwarfing
 - aminozide 2031
 - butylammonium bromides 2031
 - chlormequat 2031
- endogenous
 - determination, xanthoxin 3719
- leaf
 - colchicine treatment 6851
 - senescence 3718
 - mutants 4465
 - enzyme activity, seed, abscisic acid 5992
 - ethylene, production, inhibition, cycloheximide 4483
 - growth inhibition
 - abscisic acid derivatives, tissue culture 2804
 - 2,4-D 7717
- herbicides
 - translocation
 - 2,4-D 5988
 - PCPA 5988
- IAA translocation, DPX1840 2824
- interaction
 - applied, cytokinin active compounds, endogenous 2799
 - auxin, non-auxinic chemicals 8678
 - endothal, ethephon application 4481
 - IAA, malformin application 3721
 - light, serine 4482
 - malformin, IAA application 3721
 - nitrogen nutrition, GA 7718
- interactions 5994
- internode length, brassins 3720
- leaf
 - abscission
 - abscisic acid 2035
 - endothal 4481
 - ethephon 4481
 - IAA 2035
 - movements, IAA 6852
 - senescence
 - BA 4482
 - cycloheximide 4482
 - serine 4482
- metabolism
 - abscisic acid, tissue culture 2803
 - abscisic acid derivatives, tissue culture 2804
 - IAA 6869, 8696
- oestrogens
 - content
 - abscisic acid 5260
 - kinetin 5260
- photosynthesis, cytokinin active compounds 2799
- plant composition
 - aminozide 2031
 - butylammonium bromides 2031
 - chlormequat 2031
- pod
 - number
 - 5-chloro,2-thenyl, tri-n-butyl-phosphoniumchloride 1221
 - CTBP 5993
- proteins, content, chlormequat 5258
- responses
 - brassins 2801
 - CCC 5257
 - GA 5994
 - hydroquinone 3750
 - IAA 5994
 - kinetin 5994
 - resorcin 3750
 - vanillin 3750
- root, formation 190
- seed, weight, brassins 2801
- shoot-tip, injury, 2,4-D 7717
- sodium, absorption, kinetin 2027
- stomatal mechanism, ABA 194
- translocation
 - 2,4-D 7712
 - IAA 2795, 3714, 7712, 8696
 - SADH 1218
 - TIBA 3714
 - 2,4,5-T 7712
- vitamin B, content, 2,4-D 7717

Bean (*Phaseolus*) leaf

- abscission
 - calcium nutrition, tissue culture 6843
 - enzyme activity 5991
 - ethylene 2035
 - growth substances 4481
 - abscisic acid 2035
 - endogenous 3718
 - IAA 2035
 - abscission layer, enzyme activity 2035
 - achlorophyllous
 - enzyme activity 4480
 - microbodies 4480
 - amino acids, metabolism, annual report, UK 5153
 - anatomy, toxins, fusaric acid 4487
 - area, light, intensity 3715
 - chlorophyll
 - biosynthesis 185
 - content 1217
 - growth substances 2799
 - osmotic pressure 1217
 - disease relationship 174
 - chloroplast, metabolism 184
 - composition 2010
 - adenylates, ozone, injury 6841
 - development
 - light, coloured 3716
 - lipids, metabolism 2072
 - growth, asymmetrical 8680
 - micro-organisms, ozone 6839
 - movements
 - darkness 5989
 - growth substances 6852
 - light 5989
 - nutrients
 - content 2787
 - growth rate 2787
 - nyctinasty 6235
 - osmotic pressure, chlorophyll content 1217
 - senescence 4482
 - growth substances 4482
 - light 4482
 - nucleic acids 2879, 5244
 - soil salinity 2879, 5244
 - shape, asymmetrical 8680
 - stomatal mechanism 194
- Bean (*Phaseolus*) nutrition**
- aluminium
 - toxicity, plant tolerance 5974
 - varietal responses 5974
 - boron 4471
 - deficiency, symptoms 8685
 - sugars, content, leaf 3710
 - calcium
 - absorption, aluminium nutrition 5974
 - deficiency
 - symptoms
 - light
 - far red 7713
 - white 7713
 - leaf, abscission, tissue culture 6843
 - fertilizers
 - irrigation 5975
 - rainfall 5975
 - iron
 - absorption
 - nutrient solution
 - bicarbonate content 4507
 - composition, pH 4507
 - lead 173
 - major elements 2786
 - leaf analysis 7703
 - plant composition 7703
 - soil analysis 7703
 - molybdenum 4471
 - nitrogen 167
 - apical dominance 8698
 - interaction, growth substances 7718
 - nitrate accumulation, 1144
 - proteins, content 3701, 5242
 - sources, compared 172
 - varietal responses 3702
 - NPK, photosynthesis 8693
 - phosphorus
 - absorption, nutrient solution, bicarbonate 7787
 - proteins, content 3701
 - translocation, nutrient solution, bicarbonate 7787
 - potassium
 - absorption, leaf, tissue culture 8697

Bean (*Phaseolus*) nutrition contd.

- potassium contd.
 - deficiency, symptoms, correction, growth substances 2799
 - proteins, content 3701
 - rubidium, absorption, leaf, tissue culture 8697
 - sodium, absorption, leaf, tissue culture 8697
 - sulphur 4471
 - deficiency, enzyme activity 3717
 - ozone injury, prevention 2788
 - zinc, plant analysis 2019
- Bean (*Phaseolus*) pests**
- Acanthoscelides obtectus* 5262
 - irradiation, gamma rays, sterilization 2024
 - resistance 182
 - aphids 4383
 - Aphis craccivora*, vectors, virus 6846
 - A. gossypii*, vectors, virus 6846
 - Callosobruchus chinensis*, resistance 182
 - Ceratomyza ruficornis*, vectors, rugose mosaic 6845
 - Diabrotica adelpha*, vectors, rugose mosaic 6845
 - D. balteata*, vectors, rugose mosaic 6845
 - Ditylenchus dipsaci* 3878
 - Epilachna varivestis* 3709
 - Hylemya cilicrura* 5252
 - seed treatment 8692
 - soil treatment 8692
 - integrated control 3627
 - Macrosiphum euphorbiae*, vectors, virus 6846
 - Melanagromyza phaseoli* 167
 - Myzus persicae*, vectors, virus 6846
 - Pratylenchus* spp. 645
 - Tetranychus telarius* 1216, 4383
 - control, fungicides, benomyl 5253
- Bean (*Phaseolus*) plant**
- composition 4145
 - growth substances
 - aminozide 2031
 - butylammonium bromides 2031
 - chlormequat 2031
- Bean (*Phaseolus*) pod**
- ascorbic acid, content, storage 3670
 - breakage, varietal differences 5264
 - composition, storage 3670
 - maturity, forecasting 1220
 - number
 - growth substances
 - 5-chloro,2-thenyl, tri-n-butyl-phosphoniumchloride 1221
 - CTBP 5993
 - proteins, content 4941
- Bean (*Phaseolus*) propagation**
- cuttings
 - source plants
 - from irradiated seeds
 - plant respiration 3711
 - root formation 3711
 - treatment, growth substances 3711
- Bean (*Phaseolus*) root**
- composition, aluminium nutrition 5974
 - exudate, composition 189
 - nodule formation, ozone 6840
 - systems, soil, compaction 5241
- Bean (*Phaseolus*) seed**
- calcium, distribution 7713
 - composition 5997, 8703
 - protein 197
 - cytology 198
 - drying, silica gel 1137
 - embryo development 8703
 - exudate, composition 189
 - germination
 - bacterial diseases 8677
 - inhibition
 - dimethyl-formamide 6838
 - formamide 6838
 - low temperatures, breeding and selection 2784
 - proteins, metabolism 5239, 7721
 - tests 639
 - methionine, content 5978
 - production
 - harvesting, time of 5262
 - pollination, bees 5899
 - rogue elimination, flat pod 5233

Bean (*Phaseolus*) seed *contd.*

- quality, standards, annual report, Italy 6771
 - soaking, injury 192
 - sorting, air flow 4373
 - sowing
 - dates 2013, 2787, 3697, 8675–8676
 - Israel 3696
 - depth 1208
 - orientation 5237
 - row direction 640
 - spacing 640, 1207, 3697, 4467, 7700–7701
 - systems 8679
 - tunnels 2016
 - storage 1206
 - relative humidity 639
 - temperature 639
 - treatment
 - electromagnetic fields, injury 5226
 - fungicides 3622
 - benomyl 6847
 - gamma rays
 - plant respiration 3711
 - root formation on cuttings 3711
 - haemagglutinin 2798
 - insecticides 5252, 8692
 - irradiation, X-rays 191
 - molybdenum 5242
 - weight, growth substances 2801
- Bean (*Phaseolus*) shoot**
- abscission, ethylene 6854
 - abscission layer, anatomy 6854
 - xylem formation 5972

Bean (*Phaseolus*) soil

- compaction
 - disease incidence 181, 5241
 - seedling emergence 5238
 - fumigation, *Olpidium brassicae*, methyl bromide 8651
 - salinity
 - chlorine, absorption, growth substances, kinetin 2027
 - sodium, absorption, growth substances, kinetin 2027
 - sterilization, steam, disease control 8651
- Bean (*Phaseolus*) varieties** 167, 2011, 4371
- aluminum tolerance 5974
 - annual report, UK 5149
 - Bulgaria 7698
 - comparative trials 4466, 7697
 - annual report, St. Lucia 8577
 - Brazil 5235
 - French West Indies 6836
 - USSR 637
 - cyanide, content 5263
 - disease resistance 168, 1205, 6837, 7698
 - alfalfa mosaic 3703
 - Colletotrichum lindemuthianum* 3695
 - common mosaic 6835
 - mosaic virus 1212
 - Uromyces phaseoli* 3708
 - Xanthomonas phaseoli* 5234, 7696

evaluation 5236

- flowering, date 8675
- herbicides tolerance 6837
- mechanical harvesting 169, 7697, 7699
- pest resistance 7698
- processing 2785
- Pusa Parvati 5977
- seed, protein, content 1205
- soil types, acidic 2010
- Tacarigua 7699
- USSR 638

Bean (*Vicia*)

- air pollution, stomatal movements, sulphur dioxide 2039
- annual report
 - UK 3611, 5153
 - USA 7601
- breeding and selection, disease resistance, *Xanthomonas phaseoli* 5248
- carbohydrates
 - metabolism
 - darkness 8710
 - light 8710
- carbon dioxide, fixation, darkness, insecticides 8710
- cell wall, structure 203
- chloroplast
 - activity, fungicides 8713
 - proteins, biosynthesis 2045
- enzyme activity 1954

Bean (*Vicia*) *contd.*

- enzyme activity *contd.*
 - inhibition 648
 - root extracts 2033
 - leaf 2044
 - coloured light 8712
 - root 5266, 5999
 - root extracts 2033
 - enzymes
 - biosynthesis, coloured light 8712
 - determination, root 5999
 - root 5999, 7692
 - fungicides, chloroplast, activity, dithiocarbamates 8713
 - glycosides, content 8705
 - growth studies 5268
 - leaf removal 6000
 - herbicides
 - absorption, terbutryne 4468
 - injury
 - 2,4-D 4488
 - terbutryne 5888
 - plant, responses, terbutryne 4468
 - tolerance, terbutryne 4468, 5888
 - translocation, 2,4-D 4488
 - insecticides
 - application, dusts 4490
 - carbon dioxide fixation
 - darkness
 - fenitrothion 8710
 - phosalone 8710
 - injury, application methods, disulfoton 4490
 - metabolism, aldrin 2033
 - root, nodule formation 201
 - light
 - blue, enzyme activity 8712
 - red, enzyme activity 8712
 - medicinal properties 4495
 - mutagen testing 1346
 - nucleic acids, biosynthesis 3725–3726
 - organic acids, biosynthesis, stomata, mechanism 3724
- Bean (*Vicia*), *Orobanche* spp., control** 4488
- Bean (*Vicia*)**
- photoperiodism 2043
 - root
 - exudate 7725
 - metabolism 7725
 - photosynthesis 202
 - physiology 4491–4492
 - pigments, content 8705
 - pollination, bees, seed production 5899
- Bean (*Vicia*), proteins** 4484
- Bean (*Vicia*)**
- proteins 4493, 4941
 - biosynthesis, coloured light 8712
 - quality, storage temperature 6872
 - respiration, root, magnetic field 6857
 - stomata
 - guard cells
 - cytology 6856, 8736
 - organic acids, biosynthesis 3724
 - water relations 6856, 8711
 - movements
 - light 5265
 - potassium 5265
 - rubidium 7727
 - sulphur dioxide 2039
 - potassium, accumulation 5998
 - storage, temperature 5821, 6872
 - sulphur dioxide, stomatal movements 2039
 - tissue culture, chloroplasts 128
 - translocation, studies, growth substances 7726
 - transpiration, annual report, UK 1934
 - water potential, leaf, measurement 1222
 - water relations 1224
 - root 1223
 - stomata, guard cells 6856
 - weed control 6780
 - annual report, New Zealand 5152
- Bean (*Vicia*) diseases**
- Botrytis fabae* 2041**
- vectors
 - Kakothrips robustus* 8708
 - Taeniothrips vulgatissimus* 8708
 - Thrips flavus* 8708
 - Cladosporium* spp., vectors, aphids 8708
 - Fusarium solani* 4489
 - Iran 8707

Bean (*Vicia*) diseases *contd.*

- mottle virus, nucleic acid, biosynthesis 200
 - pea enation mosaic 5276
 - pea mild mosaic 4502
 - pea symptomless virus 6006
 - Pullularia* spp., vectors, aphids 8708
 - Rhizoctonia solani* 4489
 - subterranean clover stunt, vectors 6846
 - Uromyces fabae* 2042
 - wilt virus, annual report, UK 3612, 4365
 - Xanthomonas phaseoli*, resistance 5248
 - yellow mosaic, vectors 6846
- Bean (*Vicia*) growth substances**
- potassium, absorption, abscisic acid 4494
 - translocation, IAA 7726
- Bean (*Vicia*) leaf**
- removal
 - growth studies 6000
 - plant composition 6000
 - transpiration 1224
- Bean (*Vicia*) nutrition**
- nitrogen 199
 - disease development, *Rhizoctonia solani*, *Fusarium solani* 4489
 - phosphorus 199
 - disease development, *Rhizoctonia solani*, *Fusarium solani* 4489
 - potassium
 - absorption
 - growth substances 4494
 - leaf, light, tissue culture 4494
 - chloroplast activity 128
 - disease development, *Rhizoctonia solani*, *Fusarium solani* 4489
 - sulphur 199
- Bean (*Vicia*) pests**
- aphids
 - vectors
 - Cladosporium* spp. 8708
 - Pullularia* spp. 8708
 - Aphis craccivora*, vectors, virus 6846
 - A. fabae* 4490
 - fertility rate reduction, antibiotics 8709
 - A. gossypii*, vectors, virus 6846
 - Ditylenchus dipsaci* 3878
 - Kakothrips robustus*, vectors, *Botrytis fabae* 8708
 - Macrosiphum euphorbiae*, vectors, virus 6846
 - Myzus persicae*, vectors, virus 6846
 - Taeniothrips vulgatissimus*, vectors, *Botrytis fabae* 8708
 - Thrips flavus*, vectors, *Botrytis fabae* 8708
- Bean (*Vicia*) plant, composition, leaf**
- removal 6000
- Bean (*Vicia*) root**
- development, cytology 5267
 - exudate
 - composition 7725
 - photoperiodism 7725
 - metabolism
 - exudate 7725
 - photoperiodism 7725
 - nodule, nitrogen-fixing activity, soil, moisture content 2040
 - nodule formation, insecticides 201
- Bean (*Vicia*) seed**
- composition, amino acids 199
 - development, proteins, biosynthesis 2046
 - germination, glycosides, metabolism 2806
 - glycosides, biosynthesis 2806
 - production, pollination, bees 5899
 - sorting, air flow 4373
- Beauveria bassiana*, fungal parasite, *Cydia pomonella*, apple** 1768, 8396
- Bedding plants**
- air pollution, sulphur dioxide, ethylene, injury 6132
 - annual report, USA 3835
 - growing
 - Finland 8843
 - under plastic, annual report, UK 3833
 - growth substances
 - retardants
 - aminozide 6136
 - ancymidol 6136
 - chlormequat 6136
 - ethephon 6136

Bedding plants *contd.*

- irrigation, capillary, fertilizer application 6495
- nutrition
 - annual report, German Federal Republic 7844
 - NPK, requirements 6133
- ozone, injury, annual report, Canada 8836
- seed, germination, temperature 8843
- sulphur dioxide, injury, annual report, Canada 8836
- temperature, seedling production 8843

Bees

- food plants, almond 8334
- nectar removal, essential oil, content, lavender 5899
- nesting sites, blueberry 6689
- pollination
 - blueberry 536, 1066
 - cucumber and gherkin, annual report, USA 7601
 - Malus* spp. 3930
 - nectar composition, onion 2088
 - vegetables 5899

Beetroot

- annual report, UK 3613, 4365, 8584
- ascorbic acid, content, root 5172
- carotene, content, root 5172
- enzymes, leaf 5895
- lead, determination, atomic absorption spectrophotometry 6784
- nutrient absorption
 - growth substances
 - benzyladenine, tissue culture 1956
 - kinetin, tissue culture 1956
- nutritional value
 - proteins 5172
 - vitamins 5172
- photoperiodism, nitrate accumulation 1144
- photosynthesis
 - diurnal fluctuations 124
 - soil moisture 6092
- pigments, content, determination 5902
- storage, annual report, UK 3614
- sugars, translocation, temperature 5987
- tissue culture
 - leaf 1150
 - root
 - nutrient absorption
 - growth substances 1956
 - inhibition 5171
 - root discs 123
 - vitamin B, content, root 5172
- weed control 1947, 7613, 8588
- annual report, Canada 1944

Beetroot diseases

- Bacterium scabiegenum* 7614
- Botrytis cinerea*, resistance, cuticular wax 7615
- Pseudomonas fluorescens* 7614
- Rhizoctonia solani*, soil, treatment 122
- yellow vein netting 4390

Beetroot growth substances, absorption, foliar, 2,4-D 2032**Beetroot leaf**

- betanin 8592
- composition
 - organic acids 124
 - sugars 124
- organic acids, content 8594
- wax, disease resistance 7615

Beetroot nutrition

- nitrogen, nitrate accumulation, photoperiodism 1144
- NPK 118
- phosphorus 2745
- potassium absorption 2745
- potassium 2745
- phosphorus absorption 2745

Beetroot pests

- Heterodera schachtii* 1149
- H. trifolii* 3317

Beetroot, root

- composition 5172-5173
- medicinal properties 5172

Beetroot varieties 4371

- comparative trials, annual report, UK 8583
- report, Sri Lanka 2733

Begonia

- aerial tuber
 - dormancy
 - breaking 8886
 - induction 8886
 - air pollution, sulphur dioxide, ethylene, injury 6132
 - annual report
 - Austria 265
 - Belgium 8835
 - Canada 2910
 - Netherlands 6126
 - compost, amendments, compared 5419
 - dwarfing
 - growth substances 5390
 - chlormequat 5420
 - flowering
 - date, pinching 4650
 - photoperiodism 8885
 - growing
 - conifer litter, nutrition 6167
 - media, coal ash 8857
 - peat, nutrition 6166
 - as pot plants, production 5390
 - irradiation, gamma rays, mutation induction 7001
 - mutants
 - induction
 - irradiation, gamma rays 7001
 - leaf cuttings 7001
 - ozone, injury 1322
 - photoperiodism 8885
 - bulblet, formation 6168
 - flower bud, initiation 1356, 6168
 - pinching 4650
 - seedling
 - production, nutrition 6167
 - raising, pots, types compared 5390
 - sulphur dioxide, injury 1322
 - temperature
 - flower bud, initiation 1356
 - root, growth 6168
 - shoot, growth 6168
 - tissue culture, annual report, UK 2155
- Begonia bulbil**, development, photoperiodism 8885
- Begonia diseases**
- Botrytis cinerea*
 - host organic acid, content 4648
 - plant composition 2222
 - resistance 2222
 - Erysiphe cichoracearum*, control 7848
 - E. polyfaga* 6229
 - mitochondrial symptoms, electron microscopy 729
 - virus, annual report, German Federal Republic 8837
 - Xanthomonas begoniae*, annual report, Netherlands 6961
- Begonia flower**
- bud initiation
 - photoperiodism 1356, 6168
 - temperature 1356
 - sex 288
- Begonia growth substances**
- dwarfing
 - chlormequat 5420
 - Pydanon 5390
 - endogenous, determination, IAA 7289
 - responses, chlormequat 8842
 - translocation, heteroauxin 1320
 - tuber
 - sprouting
 - GA 730, 4649
 - morphactins 730
- Begonia nutrition**
- fertilizers
 - liquid, peat 6166
 - slow-release 6964
 - peat 6166
- Begonia propagation**
- aerial tubers, dormancy 8886
 - cuttings
 - leaf 8884
 - photoperiodism 2223
 - temperature 2223
 - treatment, growth substances 2223
 - source plants, nutrition 8884
 - treatment, sugars 2223
 - leaf, tissue culture 7001
- Begonia seed**
- germination, temperature 8885
 - sowing, dates, Korea 728

Begonia tuber

- dormancy 4649
- sprouting, growth substances 730

Beijerinckia indica, soil, micro-organisms, sugar cane 4103**Belgium**

- strawberry
 - growing
 - in greenhouses 7531
 - under plastic 7531

Belonolaimus longicaudatus

- bean (*Phaseolus*) pests, annual report, USA 8585
- onion pests, annual report, USA 4368

Bemisia tabaci

- control
 - cucumber and gherkin pests 5222
 - Cucumis melo* var. *flexuosus*, pests 5222
 - tomato pests 8786
 - seed, treatment, squash pests 630
 - vectors, leaf curl, tomato pests 8786
 - virus vectors, yellow leaf curl, tomato pests 3808
- Benincasa hispida**
- flower, sex, climate 5230
 - flowering, seed sowing date 6810
 - growing, USA 5944
 - medicinal properties 5944
 - nutritional value 5944
 - seed, sowing, dates, India 6810

Berberis

- air pollution, resistance, leaf, pigments 2998
- frost
 - resistance 2998
 - varieties, France 2158
- salinity, resistance, leaf, pigments 2998

Berberis propagation, cuttings, photoperiodism 1401**Berberis shoot**, alkaloids, content 2305**Berberis spp.**, fruit, anthocyanins 4362**Berberis varieties**

- annual report, Netherlands 4604
- frost resistance 2158

Bergenia spp., propagation, rhizome 4613**Berry fruits**, harvesting, mechanical, bibliography 8483**Bersama spp.**, glycosides 3059**Betula spp.**

- diseases, *Glomerella cingulata* 4209
- propagation
 - budding 4716
 - grafting 4716
- rootstocks, *Betula verrucosa* 4716
- B. verrucosa*, trunk, stress distribution 8939

Bidens bipinnata, as weeds, citrus 6339**Biennial bearing**

- bud, composition, apple 5742
- carbohydrates, metabolism, apple 6584
- citrus, annual report, Australia 1466, 9074
- flower bud, drop, fruit relationships, pistachio 994, 3503

fruit

- quality, apple 2608
- thinning, growth substances, NAA, mandarin and tangerine 801

growth substances

- aminozide, pear 4279
- chlormequat, pear 4279
- endogenous
 - apple 5742
 - mango 3241
- ethephon, mango 7204
- mandarin and tangerine 802

leaf

- composition, apple 970-971
- manganese, content, mandarin and tangerine 7139

orange, annual report, Australia 4782**phosphorus**

- content, apple 2589
- leaf, apple 2589
- root, apple 2589
- pistachio 1039
- pruning and training
 - apple 4223
 - mandarin and tangerine 1477
- review, mango 3238
- shoot
 - carbohydrates, content, mango 3239

Biennial bearing contd.

- shoot contd.
 nitrogen, content, mango 3239
- Biological control** 2501, 4139, 5051
- Achrysocaris promecothecae*, parasite of,
Promecotheca cumingi, coconut 8143
- Adelencyrtus miyaraei*, parasite of,
Aulacaspis tegalensis, sugar cane 9256
- Afromelanichneumon sporadicus*, parasite of,
Ascotis selenaria, coffee pests 1584
- Agistemus fleschneri*, predator on,
Panonychus ulmi, apple 4213
- Agistemus* spp., predator on,
Eutetranychus orientalis, citrus 1488–1489
- Agrobacterium radiobacter*, non-pathogenic biotype, inhibitor,
Agrobacterium radiobacter, pathogenic biotype 443
- A. radiobacter* var. *radiobacter*, antagonistic to, *Agrobacterium radiobacter* var. *tumefaciens*, peach 2642
- Agulla xanthostigma* 3409
- Amblyseius cucumeris*, predator on,
Eutetranychus orientalis, citrus 1488
- A. hibisci* predator on
Brevipalpus californicus, citrus 1489
Eutetranychus orientalis, citrus 1488
- A. spp.*, predator on, *Eutetranychus orientalis*, citrus 1489
- Anagrus epos*, parasite of, *Erythroneura ziczca*, grapevine 5861
- Anagrus saccharicola*, parasite of,
Saccharicococcus sacchari, sugar cane 8242
- Apanteles flavipes* parasite of
 borers, sugar cane 9255
Diatraea saccharalis, sugar cane 2469
- Aphytis africanus*, parasite of, *Aonidiella aurantii*, citrus 9096
- Aphytis melinus* parasite of
Aonidiella aurantii citrus 1492, 9097
 orange 1495
- Aspidiotus hederae*, citrus 1492
- Chrysomphalus dictospermi*, citrus 1492
- apple pests, annual report, German Federal Republic 6506
- Aschersonia* spp., fungal parasite,
Dialeurodes citri, citrus 8081
- Ascogaster quadridentata* parasite of,
Grapholitha funebrana, plum 6660
- Aspergillus flavus*, fungal parasite, *Cydia pomonella*, apple 1768, 8396
- Bacillus thuringiensis* 447
- Desmia funeralis*, grapevine 1922
- Mythimna phaea*, sugar cane 8234
- Paramyelois transitella*, almond 4955
- Pteris rapae*, cabbage 1172, 4427, 7657
- Plutella maculipennis*, cabbage 6798
- P. xylostella*, cabbage 4427
- Spodoptera frugiperda*, cabbage 4427
- Trichoplusia ni* cabbage 1172, 4427, 7657
 annual report, USA 8585
 lettuce 5913
 watermelon 6824
- Beauveria bassiana*, fungal parasite, *Cydia pomonella*, apple 1768, 8396
- Campoplex* spp. 3409
- Cephalosporium aphidicola*, fungal parasite, aphids, cucumber and gherkin 5956
- Chelonus starkii* 3409
- Chilocorus bipustulatus*, predator on, scale insects, citrus pests 1490
- C. cacti*, predator on, *Aonidiella aurantii*, citrus 9096
- C. nigratus*, predator on, *Aulacaspis tegalensis*, sugar cane 9256
- Chrysopa carnea*, predator on,
Panonychus ulmi, apple 4213
- C. nigricornis*, predator on, *Panonychus ulmi*, apple 4213

Biological control contd.

- Chrysopa* contd.
C. rufilabris, predator on, *Panonychus ulmi*, apple 4213
- coccinellids, predator on, *Aphis craccivora*, legumes 6846
- Comperiella bifasciata* parasite of
Aonidiella aurantii, citrus 9096
- Chrysomphalus aonidum*, citrus 1491
 parasite of *Aonidiella aurantii*, citrus 9097
- Cordyceps heteropoda*, fungal parasite,
Melampsalta puer, sugar cane 1638
- Cryptus nigripictus*, parasite of, *Ascotis selenaria*, coffee pests 1584
- Dasytalon aegeriae*, parasite of, *Ficivora leucoteles*, fig 73
- Deraecoris nebulosus*, predator on,
Panonychus ulmi, apple 4213
- Diatraea* spp., review 1640
- Dibrachys cavus* 3409
- Dimmockia javanica*, parasite of,
Promecotheca cumingi, coconut 8143
- Encarsia* spp., parasite of, *Trialeurodes* spp., tomato, annual report, UK 5885
- Enterobacter aerogenes* antagonistic to
Pseudomonas tolaasi, mushroom diseases 3828
- P. tolaasii* 2905
- Entomophthora aphidis*, fungal parasite, aphids, peach 1022
- E. planchoniana*, fungal parasite, aphids, peach 1022
- E. spp.*, fungal parasite, *Mythimna phaea*, sugar cane 8234
- Ephialtes* spp. 3409
- Epistrophe balteata*, predator on, aphids, peach 1022
- Eriopsis connexa*, predator on, *Eriophyes vitis*, grapevine 5134
- Forficula auricularia* 3409
- fungal parasites, *Capitophorus horni*, artichoke, globe 3635
- Himacerus apterus* 3409
- Hyaloides* spp., predator on, *Panonychus ulmi*, apple 4213
- Hymenobosmina* spp., parasite of,
Batrachedra amydraula, date 1514
- Hymenoptera
 parasite of, *Lecanium deliae*, citrus 6351
- parasites of, *Capitophorus horni*, artichoke, globe 3635
- insects, coffee pests 5622
- Isaris sinclairii*, fungal parasite, *Mogannia hebes*, sugar cane 9257
- Lathrolestes caudatus*, parasite of, *Ardis bruniventris*, rose, annual report, Netherlands 6961
- Leptothrips mali*, predator on,
Panonychus ulmi, apple 4213
- Leskia aurea* 3409
- Lixophaga diatraeae*, parasite of, *Diatraea saccharalis*, sugar cane 2469
- L. sphenophori*, parasite of, *Rhabdoscelus obscurus*, sugar cane 5653
- Lymanon* spp., parasite of, *Tapajosa rubromarginata*, sugar cane 5655
- Metarrhiza anisopliae*, fungal parasite,
Mogannia hebes, sugar cane 9257
- Metaseiulus occidentalis* predator on
Eotetranychus willamettei, grapevine 1920
- Tetranychus pacificus* grapevine 1920
 peach 81
- Microdus dimidiatus* 3409
- mites
 predators on
 mites
 citrus 366
 fig 72
 fruit trees and plants 29
- natural enemies, *Calairo cerasi*, fruit trees and plants 31
- Oligosita* spp., parasite of, *Numicia viridis*, sugar cane 8241

Biological control contd.

- Ootetrastichus beatus*, parasite of,
Numicia viridis, sugar cane 8241
- Opius concolor*, parasite of, *Dacus oleae*, olive 6377
- Orius insidiosus*, predator on, *Panonychus ulmi*, apple 4213
- Paecilomyces fumoso-roseus*, fungal parasite, *Zephodia convolutella*, small fruits 7498
- Pheidole megacephala*, predator on,
Rhabdoscelus obscurus, sugar cane 5653
- Phytoseiulus persimilis* predator on
Tetranychus telarius 18
 annual report, UK 8583
 cucumber and gherkin 1193, 7687
 rose 4711
- Plagiognathus politus*, predator on,
Panonychus ulmi, apple 4213
- Pronematus* spp., predator on,
Eutetranychus orientalis, citrus 1488–1489
- Pseudomonas fluorescens* antagonistic to
Pseudomonas tolaasi, mushroom diseases 3828
- P. tolaasii* 2905
- P. spp.* antagonistic to
Colletotrichum lagenarium 5952
Fusarium roseum, carnation 2922
Pseudomonas tolaasi, mushroom diseases 3828
- P. tolaasii* 2905
- review 4930
 sugar cane pests 2470
- Scambus* spp. 3409
- Scolothrips indica*, predator on,
Eutetranychus orientalis, citrus 1489
- S. indicus*, predator on, *Eutetranychus orientalis*, citrus 1488
- S. sexmaculatus*, predator on, *Tetranychus pacificus*, peach 81
- Scopulariopsis brevicaulis*, fungal parasite,
Cydia pomonella, apple 1768, 8396
- Scymnus gracilis*, predator on,
Eutetranychus orientalis, citrus 1488–1489
- Stenocranophilus quadratus*, parasite of,
Saccharosydne saccharivora, sugar cane 8243
- Stethorus punctum*, predator on,
Panonychus ulmi, apple 4213
- Syrphus* spp., predator on, *Brevicoryne brassicae*, cabbage 8624
- S. vitripennis*, predator on, aphids, peach 1022
- Telenomus alecto*, parasite of, *Chilo infuscatellus*, sugar cane 1641
- Tetradonema plicans*, parasite of, sciarid flies, mushroom 7836
- Tetrastichus* spp., parasite of,
Thomasiina theobaldi, raspberry 2688
- Trichoderma viride* antagonistic to, *Stereum purpureum*, plum 8476
 fungal parasite, *Stereum purpureum*, plum 6659
- Trichogramma australicum*, parasite of,
Chilo infuscatellus, sugar cane 1641
- T. spp.* parasite of
Archips xylosteana apple 2580
 cherry 2580
- Trombidium* spp., predator on, *Phylloxera vitifoliae*, grapevine 1921
- Typhlodromus occidentalis* predator on,
Tetranychus telarius, hop 7093
- T. rhenanus*, predator on, *Brevipalpus californicus*, citrus 1489
- Tythus mundulus*, predator on,
Perkinsiella saccharicida, sugar cane 1637
- Verticillium hemileiae*, fungal parasite of,
Hemileia vastatrix, coffee 1580
- V. intertextum*, fungal parasite, *Pentalonia nigronervosa*, cardamoms 6253

Biological control *contd.*

- virus
 - Cydia pomonella* apple 8395
 - apple pests, annual report, Australia 450
 - Mythimna phaea*, sugar cane 8234
 - Pieris rapae*, cabbage 1172, 7657
 - Trichoplusia ni*, cabbage 1172, 7657
 - of weeds 4139
 - Zetzellia mali*, predator on, *Panonychus ulmi*, apple 1756, 4213
- Birch, annual report, Netherlands 4604
- Birds**
 - damage, parakeets, guava 9174
 - protection against 3326
 - bullfinches, pear pests 86
 - economics, cherry 5021
 - grapevine 3589
 - review, tropical crops 4830
 - various
 - cherry 7430
 - date pests 2417
- Bismuth**, leaf analysis, standards, fruit trees and plants 2496
- Bixa orellana*, varieties, annual report, Sarawak 3933
- Black currant**
 - annual report
 - Belgium 4297
 - German Federal Republic 6669
 - Irish Republic 1857
 - New Zealand 5074
 - UK 1856, 3514-3515, 7489
 - Yugoslavia 3517
 - breeding and selection 2673
 - annual report, Sweden 5075
 - disease resistance, *Sphaerotheca mors-uvae* 7492
 - fruit, ascorbic acid content 2674
 - dormancy
 - breaking, temperature 907
 - frost resistance 6671
 - economics
 - EEC 3343
 - UK 3343
 - flowering, temperature sums 4312, 5803
 - frost
 - resistance
 - dormancy 6671
 - light 4310, 6671
 - nitrogen nutrition 8485
 - phosphorus nutrition 8485
 - photoperiodism 4310, 6671
 - fungicides
 - injury
 - copper oxychloride 4308
 - Morestan 7499
 - zineb 4308
 - mite control, *Cediphyopsis ribis*, benomyl 4309
 - residues
 - fruit
 - benomyl 4308
 - mancozeb 4308
 - maneb 4308
 - harvesting
 - biennial 3519
 - fruit, loosening 6678
 - mechanical 1046, 3519
 - equipment 2672
 - fruit, loosening, growth substances 1858
 - Hydrapick machine 8487
 - labour requirements 5804
 - pest incidence 1049
 - shakers 5804
 - heat treatment 1690
 - herbicides
 - tolerance, simazine 5081, 6672
 - translocation
 - simazine 5081
 - annual report, UK 3521
 - yield increase, simazine 6672
 - irradiation, gamma rays, injury 3416
 - irrigation, trickle 1046
 - light
 - frost, resistance 4310, 6671
 - sugars, content 4310
 - mulching, peat 4190
 - nutrient absorption, soil, amendments 6673

Black currant *contd.*

- phenolic compounds, content, leaf, disease resistance, *Sphaerotheca mors-uvae* 6675-6676
- photoperiodism
 - frost resistance 4310, 6671
 - shoot, growth 104
- planting, spacing, harvesting, mechanical 3519
- pollination
 - annual report, UK 3534
 - cross- and self- compared, fruit set 4312
 - insects 7501
- processing, purée, varietal behaviour 7493
- production and trade
 - EEC 3343
 - UK 3343
- pruning and training 3519
- mechanical harvesting 2676
- radioactivity, natural 1843
- seedling, production, seed source fruit position 1862
- sugars, content, light 4310
- temperature
 - dormancy, breaking 907
 - fruit, set 5803
 - sums, flowering 4312, 5803
 - varietal behaviour 5803
 - tissue culture, shoot 2552
 - weed control 2675, 6672, 7494
 - winter hardiness, varietal differences 8484
- Black currant diseases**
 - arabis mosaic virus 531
 - Botrytis* spp. 5731
 - Cronartium ribicola* 3520
 - control, annual report, German Federal Republic 8481
 - varietal resistance 3520
 - Drepanopeziza ribis*
 - control, annual report, German Federal Republic 8481
 - varietal differences 4308
 - Gloeosporium* spp., varietal resistance 1048
 - Mycosphaerella ribis*, varietal differences 4308
 - Pseudopeziza ribis* 5731
 - reversion, annual report, German Federal Republic 4298
 - Sphaerotheca mors-uvae* 3520, 5731, 6674
 - control 7499
 - annual report, German Federal Republic 8481
 - resistance 6675
 - breeding and selection 7492
 - varietal resistance 6676
- Black currant disorders, fasciation** 2677
- Black currant flower**
 - biology 4311
 - bud development 4311
 - bud initiation 104
 - nitrogen nutrition 1860
 - time 5082
- Black currant fruit**
 - ascorbic acid
 - content 1050, 2674
 - varietal differences 8488
 - carotene, content, varietal differences 8488
 - composition 101
 - development 4311
 - drop 4313
 - loosening
 - growth substances 6678
 - ethephon 5801
 - mechanical harvesting 1858
 - parthenocarpy, growth substances, GA 1861
 - set
 - growth substances, GA 1861, 5699
 - nitrogen nutrition 8485
 - phosphorus nutrition 1860, 8485
 - pollination 4312
 - temperature 5803
 - size, plant nutrition 8486
 - sugars, content, plant nutrition 8486
- Black currant growth substances**
 - endogenous, bud 527
 - flower bud, initiation 104

Black currant growth substances *contd.*

- fruit
 - loosening
 - ethephon 5801, 6678
 - mechanical harvesting 1858
 - parthenocarpy, GA 1861
 - set, GA 1861, 5699
- Black currant nutrition**
 - cobalt
 - fruit
 - composition 8486
 - size 8486
 - iodine
 - fruit
 - composition 8486
 - size 8486
 - manganese
 - fruit
 - composition 8486
 - size 8486
 - nitrogen
 - frost resistance 8485
 - fruit, set 8485
 - leaf analysis 1860
 - phosphorus
 - frost resistance 8485
 - fruit, set 8485
 - leaf analysis 1860
- Black currant pests**
 - Aphis grossulariae* 5079
 - Cecidophyopsis ribis* 4309
 - control 7496
 - fungicides, benomyl 4309
 - Clepsis spectrana*, population studies, mechanical harvesting 1049
 - Cryptomyzus ribis* 5079
 - Dasyneura tetensi* 7497
 - Eriosoma ulmi* 5079
 - Hyperomyzus lactucae* 5079, 5802
 - Plesiocoris rugicollis* 5802
 - survey, Sweden 5802
 - Synanthedon tipuliformis* 6677
 - Zephodion convolutella*, biological control 7498
- Black currant propagation, cuttings,** treatment, growth substances 869
- Black currant root**
 - systems 4307
 - soil cultivation 4307
- Black currant seed**
 - composition 101
 - development 5083
 - germination, source fruit position 1862
- Black currant shoot**
 - anatomy 4304
 - breakage 4304
- Black currant soil, amendments, mushroom** compost, nutrient availability 6673
- Black currant varieties** 1859
- comparative trials
 - Finland 8484
 - USSR 4306
- disease resistance
 - Cronartium ribicola* 3520
 - Drepanopeziza ribis* 4308
 - Mycosphaerella ribis* 4308
 - Sphaerotheca mors-uvae* 6676
- flower bud, initiation 5082
- fruit, composition 8488
- pollen compatibility 4312
- pollination 7501
- processing, purée 7493
- temperature sums 5803
- winter hardiness 4306, 8484

Blackberry

- annual report
 - Netherlands 6670
 - UK 7489
- breeding and selection, annual report, USA 1440, 5078
- economics
 - EEC 3343
 - UK 3343
- frost, injury, critical temperatures 4159
- growing, German Federal Republic 7504
- harvesting, mechanical 1046
- irrigation, trickle 1046
- production and trade
 - EEC 3343
 - UK 3343
- pruning and training
 - mechanical harvesting, annual report, New Zealand 5074

Blackberry contd.

- pruning and training *contd.*
- time of 1052
- research, review 2670

Blackberry pests

- Amphorophora rubi* 5079
- Aphis ruborum* 5079
- Macrosiphum fragariae* 5079
- M. funestum* 5079

Blackberry varieties

- annual report, Irish Republic 1857
- Himalaya 1052
- processing 7505
- register, USA 4156
- Thornfree 7505
- Thornless Evergreen 1052

Blanching, chicory 5176**Blueberry**

- annual report
 - Canada 538, 2669
 - Irish Republic 1857
 - Netherlands 6670
 - USA 3516, 5077, 7490
 - Yugoslavia 3517
- anthocyanins 6688
- breeding and selection 1067
- annual report, USA 1440, 5078
- disease resistance, *Phytophthora cinnamomi* 5090
- calcium, content, leaf, nitrogen nutrition 7515
- defoliation, before weed control 8492
- enzyme activity
 - determination, leaf 1063
 - fruit, ripening 88
- fungicides, Trithion, fruit, flavour 8499
- growing 6685
- USSR 4299
- growth-yield relationships 7515
- harvesting, time of 3532
- herbicides
 - injury
 - 2,4-D 8492
 - paraquat 8493
- hybrids 1065
- photoperiodism 6688
- growth substances, endogenous 3530
- photosynthesis 6688
- planting, material, cuttings and seedlings compared 2689
- pollination
 - bees 536, 1066
 - annual report, Canada 6668
 - nesting sites 6689
- pruning and training
 - chemical 8493
 - mechanical 8493
- research, review 2670
- respiration 6688
- seedling, growth, soil, types 105
- soilless culture, nutritional studies 4319
- weed control 7513, 8492
- Agropyron repens* 8497
- winter hardiness
 - desiccation 6688
 - nitrogen nutrition 7515
- yield-growth relationships 7515

Blueberry diseases

- Botryosphaeria dothidea* 1868
- varietal resistance 1868
- Monilinia vaccini-corymbosi*, annual report, Canada 6667
- Phytophthora cinnamomi*, resistance, breeding and selection 5090
- red ring spot 3528

Blueberry disorders, red wart 7516**Blueberry flower**

- bud initiation
 - NPK nutrition 8493
 - pruning and training 8493
- morphology, fruit set 3531
- nectar, volatile constituents 3529
- removal
 - fruit, size 3527
 - plant, size 3527

Blueberry fruit

- anthocyanins, content, ripening 7517
- composition 101
- nitrogen nutrition 6690
- sugars 1065
- development 6688
- flavour, fungicides 8499

Blueberry fruit contd.

- loosening, growth substances, ethephon 5801
- parthenocarpic, growth substances, endogenous, photoperiodism 3530
- pigments 1065, 6688
- ripening
 - anthocyanins 7517
 - enzyme activity 88
- set 6688
- flower morphology 3531
- size
 - deblossoming 3527
 - nitrogen nutrition 7515
 - seed number per fruit 537

Blueberry growth substances

- endogenous, flower bud, photoperiodism 3530
- fruit, loosening, ethephon 5801

Blueberry leaf

- analysis, standards 7514
- removal, chemical 8492

Blueberry nutrition 6688

- general, leaf analysis, standards 7514
- magnesium 7515
- nitrogen 7515, 8494
- fruit, composition 6690
- leaf
 - abscission 8495
 - size 8495
 - sources, soilless culture 4319
- NPK, flower bud, initiation 8493
- phosphorus 7515
- potassium 7515
- trace elements, chelates 8496

Blueberry pests

- aphids, damage, red wart 7516
- mites, damage, red wart 7516

Blueberry plant, size, deblossoming 3527**Blueberry propagation**

- cuttings
 - treatment
 - fungicides 1866
 - growth substances 1866
 - nutrients 1866

Blueberry rhizome

- bud development, nitrogen, content 1064
- nitrogen, content, seasonal variations 535

Blueberry root, nitrogen, content, seasonal variations 535**Blueberry seed**

- development 1067
- germination 6688
- number per fruit, fruit, size 537

Blueberry soil

- amendments, sawdust, weed control 8497

- types, seedling, growth 105

Blueberry stem, nitrogen, content, seasonal variations 535**Blueberry varieties**

- comparative trials
 - annual report, New Zealand 5074
 - USA 8491
- disease resistance, *Botryosphaeria dothidea* 1868
- processing 5092
- register, USA 3356

Blueberry eriantha, essential oil, medicinal properties 3016

- B. lacera*, as virus indicator plants 3966
- Blumeriella jaapii*

- cherry diseases 7429, 8439
- control, cherry diseases 8305

Boletus edulis

- annual report, Netherlands 6120
- edible fungi 6958

Bolting

- leek 4519
- photoperiodism 5300
- temperature 5300
- lettuce, growth substances 5914
- radish, growth substances 5941
- spinach 127
- varietal resistance, cabbage 4418

Bombax spp., flower, composition, polysaccharides 1426**Book review**

- Acland J.D., East African crops 376
- Baker, J.J., Diseases of cultivated plants 1957-1968 6497

Book review contd.

- Balázs, K. ; Vajna, L., Bogyós gyümölcsvek védelme [The protection of berry fruits] 2671
- Baldassari, T., Frutticoltura industriale con la nuova palmetta [Fruit growing for industry with the new palmette system] 6513
- Bean, W.J., Trees and shrubs hardy in the British Isles 8283
- Bickford, E.D.; Dunn, S., Lighting for plant growth 8307
- Brown, G.E., The pruning of trees, shrubs and conifers 3907
- Brózik, S. [Editor], Gyümölcsfajta-ismertető [Guide to fruit varieties] 3355
- Carr, D.J. [Editor], Plant Growth Substances 7283
- Childers, N. F. ; Abdalla, D. A., Modern fruit science: Laboratory manual 436
- Childers, N.F., Modern Fruit Science 6472
- Crawford, H.M. ; McGourty, F.Jr. ; Dietz, M.J. [Editors], Herbs and their ornamental uses 4607
- Crüger, G., Pflanzenschutz im Gemüsebau [Plant protection in vegetable growing] 3626
- Emboden, W., Narcotic plants, hallucinogens, stimulants, inebriants and hypnotics – their origins and uses 8970
- Finney, D.J., An introduction to statistical science in agriculture 3295
- Freidrich, G. ; Preusse, H. ; Reichel, M., Obstbau in Wort und Bild [Fruit growing in words and pictures] 900
- Fryer, J.D. ; Makepeace, R.J. [Editors], Weed control handbook Vol II. Recommendations 7277
- Gherghi, A. ; Mircea, I. ; Millim, K., Valorificarea merelor și pevelor în stane proaspătă [Marketing fresh apples and pears] 5706
- Godin, V. J. ; Spensley, P. C., Oils and oilseeds 355
- Hentig, W.-U. von ; Mante, W. ; Steib, T., Gartenbau international. Beiträge zur Wirtschaftsgeographie des Gartenbaues. Teile 1 und 2. [Horticulture international. Contributions on the economic geography of horticulture. Parts 1 and 2.] 6473
- Hentig, W.-U. von ; Mante, W. ; Steib, T., Gartenbau international. Beiträge zur Wirtschaftsgeographie des Gartenbaues. Teile 1 und 2. [Horticulture international. Contributions on the economic geography of horticulture. Parts 1 and 2.] 6474
- Herklots, G.A.C., Vegetables in south-east Asia 5147
- Hess, D., Pflanzenphysiologie [Plant Physiology] 6475
- Hutchinson, J., British wild flowers 434
- Janick, J., Horticultural Science 1670
- Jones, G.E. ; McGourty, F., Jr. [Editors], Rhododendrons and their relatives 7040
- Koinov, G. [Editor], [Beans in Bulgaria] 8670
- Kolesnikov, V.A., The root system of fruit plants 1
- Lousley, J.E., The flora of the Isles of Scilly 861
- Marsh, R.W., [Editor], Systemic fungicides 4927
- Mitchell, A.F., Conifers in the British Isles 7034
- Mitrakos, K. ; Shropshire, W., Jr., Phytochrome 5687
- Mohr, H., Lectures on photomorphogenesis 7305
- Noack, E. ; Kallauch, W. ; Hentig, W. - U. von, Rosenkultur unter Glas und im Freiland [Rose growing under glass and in the open] 7047
- Ordish, G., The great wine blight 574
- Paglietta, R., La coltura del lampone [The cultivation of the raspberry] 5805

Book review contd.

- Popov, P. ; Dimitrov, I. ; Iliev, L. ; Georgiev, S., Mak *Papaver somniferum* [Poppy, *Papaver somniferum*] 2337
- Populer, C., Les épidémies de l'oidium de l'hévéa et la phénologie de son hôte dans le monde [Epidemics of *Oidium heveae* and the phenology of rubber throughout the world] 6425
- Purseglove, J. W., Tropical crops : monocotyledons 2 1669
- Purseglove, J.W., Tropical crops : monocotyledons 1 1668
- Rees, A.R., The growth of bulbs 8882
- Reich, W., Im Garten. Gartenarbeit nach allen Regeln der Kunst in 405 Bildern [In the garden. Garden work according to the rules of the art in 405 pictures] 6476
- Schacht, W., Frühjahrsboten. Erster Blütenflor im Garten [Harbingers of spring. The first flowers in the garden] 6125
- Schnell, R., Introduction à la phytogéographie des pays tropicaux. I. Les flores - les structures. 2. Les milieux - les groupements végétaux [Introduction to tropical phytogeography. I. Flora and structures. 2. Habitats and plant groups] 9120
- Simmons, A.F., Growing unusual fruit 435
- Smith, M.W.G., National apple register of the United Kingdom 34
- Stearn, W. T., Botanical Latin 7279
- Stoev, K.D., Fiziologicheskie osnovy vinogradarstva [Physiological bases of viticulture] 582
- Storozhenko, E. M., Bolezni plodovykh kul'tur i vinograda [Diseases of fruit crops and grapes] 6517
- Stover, R.H., Banana, plantain and abaca diseases 7175
- Vasilev, V.N., Badem [The almond] 3363
- Weaver, R.J., Plant growth substances in agriculture 7280
- Webster, J.M. (Editor), Economic nematology 2484
- Wilks, J.H., Trees of the British Isles in history and legend 7938
- Borage diseases, *Entyloma boraginis*, control, annual report, German Federal Republic 7964**
- Boron**
- absorption
- calcium nutrition, mandarin and tangerine 6344
- light, sugar cane 4102
- orange 6342-6343
- relative humidity, sugar cane 4102
- sugar cane, report, USA 6382
- temperature, sugar cane 4102
- application
- foliar
- capsicum 6892-6893
- disease incidence, grapevine 7568
- grapevine 7568
- ornamental flowers 1343
- strawberry 5816
- availability
- nitrogen nutrition
- chrysanthemum 8589
- vegetables 8589
- calcium nutrition, tomato, annual report, Sabah 8582
- chlorosis, fruit trees and plants, 7319
- cold, resistance, lemon nutrition 1483
- content
- fruit, disorders, pear 3493
- leaf
- apple 6553
- oil palm 7212
- rootstocks, plum 2657
- copper nutrition, onion 7750
- cuttings, treatment, blueberry 1866
- deficiency 3299
- apricot nutrition 993
- cacao, annual report, Ghana 7177
- chrysanthemum 8861
- coffee 9166
- control measures, oil palm 9187

Boron contd.

- deficiency contd.
- cucumber and gherkin 7683
- fruit trees and plants 6499
- hop 6499
- nuts 6499
- ornamental plants 6499
- root composition, sugar cane 8217
- swede, annual report, German Federal Republic 7599
- symptoms
- bean (*Phaseolus*) 8685
- cauliflower and broccoli nutrition 1983
- coffee 3197
- correction, growth substances, aminozide, tagetes 5416
- oil palm 3245
- oil palm nutrition 1603
- photoperiodism, tagetes 5416
- vegetables 6499
- determination, methods, mandarin and tangerine 3120
- disease incidence, tobacco mosaic, tomato 6913
- disease resistance, *Valsa mali*, apple 475
- enzyme activity, grapevine 5138
- flower
- calyx splitting, carnation nutrition 1325
- drop, grapevine 5122
- formation, ornamental flowers 1343
- flower bud, initiation, grapevine 5122
- flowering, autumn, lemon nutrition 1483
- fruit
- composition
- mandarin and tangerine 7158
- strawberry 5817
- disorders, apple, annual report, UK 3347
- peel thickness, apple 6559
- quality, strawberry 5817
- size, mandarin and tangerine 7158
- leaf
- chlorophyll, content, apple 4976
- pigments, content, apple 4976
- leaf analysis
- apple 3402
- citrus 1484
- cucumber and gherkin 7683
- oil palm 7213
- pest resistance, *Tetranychus pieroei*, oil palm 6411
- plant, anatomy, grapevine nutrition 5105
- pollen, germination, trees and shrubs 3000
- respiration, grapevine 5138
- seed, production, ornamental flowers 1343
- sources
- chrysanthemum 8589
- vegetables 8589
- sugars
- content
- grapevine 5122
- leaf, bean (*Phaseolus*) 3710
- toxicity
- cucumber and gherkin 7683
- enzyme activity, sugar cane 8217
- grapefruit nutrition, annual report, USA 791
- nitrogen nutrition
- chrysanthemum 8589
- vegetables 8589
- photographic surveys, grapefruit nutrition, annual report, USA 790
- plant tolerance, irrigation water, vegetables, ornamental plants, fruit trees and plants 5163
- root composition, sugar cane 8217
- translocation
- oil palm 7212-7213
- sugar cane 4102
- report, USA 6382
- winter hardiness, apple 4976
- Boronia spp., growing, Italy 5479**
- Borreria spp.**
- as weeds
- oil palm 4075
- rubber 4881, 7226, 9208
- tea 9272
- Botanical Latin, book 7279**

Botryodiplodia malorum, apricot diseases 6610

- B. spp.**, Venezuela, avocado diseases 9071
- B. theobromae**
- banana diseases 1546
- Bursera* spp., diseases 8993
- Dioscorea* spp., diseases 6297
- lily diseases 1360
- sapodilla diseases 6427
- Botryosphaeria dothidea**, blueberry diseases 1868
- Botryotinia fuckeliana**, control, grapevine diseases 8482
- B. narcissicola**, narcissus diseases, annual report, UK 3874
- Botrytis allii**
- bulb treatment, shallot diseases 1258
- onion diseases, annual report, Netherlands 6772
- B. cinerea**
- boron nutrition, strawberry diseases 5817
- cacti, diseases 2267
- calcium nutrition, lettuce diseases 865
- coffee diseases 4860
- control
- asparagus diseases 8733
- grapevine diseases 7575
- growth substances, grapevine diseases 5129
- methods compared, strawberry diseases 6705-6706
- strawberry diseases 6707, 7538, 8482
- tomato diseases 8779
- copper nutrition, strawberry diseases 5817
- cyclamen diseases
- annual report
- Austria 265
- Netherlands 6126
- fig diseases 8450
- fruit storage
- apple diseases 485
- controlled atmosphere, strawberry diseases 7542
- fig diseases 1010
- gerbera diseases 2200
- gooseberry diseases, annual report, Netherlands 5073
- graftwood storage, grapevine diseases 3568
- grapevine diseases 578-580, 1115, 1915, 1917, 2723, 3583, 7574
- annual report
- German Federal Republic 4298
- Yugoslavia 3517
- host enzyme activity, tomato diseases 1296
- host organic acid, content, begonia diseases 4648
- host-pathogen relationships, tulip diseases 294
- incidence, strawberry diseases 4323
- irradiation
- ionizing
- artichoke, globe, diseases 604
- strawberry diseases 604
- leaf, micro-organisms, ozone, bean (*Phaseolus*) 6839
- lettuce diseases 7633
- annual report, German Federal Republic 7597, 8579
- magnesium nutrition, begonia diseases, annual report, Belgium 8835
- manganese nutrition, strawberry diseases 5817
- nitrogen nutrition, tomato diseases 5345
- phytoalexins, production, capsicum diseases 1268
- plant composition, begonia diseases 2222
- post-harvest dips
- apple diseases 5007
- celery diseases 6948
- pear diseases 5007
- post-harvest sprays, celery diseases 6948
- potassium nutrition, tomato diseases 5345
- pruning and training, grapevine diseases 6743
- raspberry diseases 7509
- resistance
- begonia diseases 2222
- capsicum diseases 5324
- cuticular wax, beetroot diseases 7615

- Botrytis cinerea* contd.**
 resistance contd.
 proteins, metabolism, cabbage diseases 5935
 small fruits diseases
 annual report
 Irish Republic 1857
 UK 3515
 spore numbers, grapevine diseases 5858
 storage diseases, grapevine diseases 1916
 storage rots, strawberry diseases 1078
 strawberry diseases 547, 1073,
 1882–1884, 3319, 4324, 7539
 annual report
 Canada 538, 6668
 German Federal Republic 5094,
 8481
 New Zealand 5074
 UK 5096
 USA 6692
 tomato, annual report, UK 5884
 tomato diseases 6917
 tulip diseases 3877
 varietal resistance
 onion diseases 8737
 poinsettia diseases 3916
 strawberry diseases 4323, 5813,
 7524–7525, 8504
- B. elliptica***, Argentina, lily diseases 6181
- B. fabae***
 vectors
 Kakothrips robustus, bean (*Vicia*)
 diseases 8708
 Taeniothrips vulgatissimus, bean (*Vicia*)
 diseases 8708
 Thrips fluvus, bean (*Vicia*) diseases
 8708
- Botrytis gladiolorum***
 flower infection, gladiolus diseases, annual
 report, USA 1441, 6129
 freesia diseases 2236
- B. spp.***
 azalea diseases, annual report, Belgium
 8835
 bean (*Phaseolus*) diseases
 annual report
 Irish Republic 1939
 UK 3611
 bean (*Vicia*) diseases, annual report, UK
 5153
 black currant diseases 5731
 annual report, UK 7489
 bulbs, diseases 6165
 cherry diseases 5022
 control
 cabbage diseases, annual report,
 German Federal Republic 7600
 controlled atmosphere storage,
 strawberry diseases 3558
 gladiolus diseases 7899
 lettuce diseases 7626
 strawberry diseases, annual report,
 Canada 7488
 cucumber and gherkin diseases, annual
 report, Netherlands 1135
 fruit storage, apple diseases 1798, 4224
 fungicides, application, method,
 quintozone, lettuce diseases 1970
 grapevine diseases 3579, 8558
 hop diseases, annual report, German
 Federal Republic 340, 7064
 macadamia diseases 375
 onion diseases, annual report, UK 5885
 post-harvest dips, apple diseases 986
 protected cultivation, strawberry diseases
 1878
 resistance, strawberry, annual report, USA
 5077
 small fruits, diseases, annual report,
 German Federal Republic 6669
 strawberry diseases 5731
 annual report, UK 3514
- B. squamosa***, onion diseases, annual report,
 Canada 1944
- B. tulipae***
 bulbs, diseases 3864
 hail damage, tulip diseases 2256
 host-pathogen relationships, tulip diseases
 294
 soil, fumigation, tulip diseases 2959
 tulip diseases 3877
- Botrytis tulipae* contd.**
 tulip diseases contd.
 annual report
 Netherlands 2219
 UK 732, 7907
- Bougainvillea**, growing, as pot plants,
 production 4685
- Bougainvillea growth substances**
 dwarfing, MH 1384
 growth, retardation 314
- Bougainvillea propagation**
 budding, shield 7940
 cuttings
 tip 4685
 treatment
 growth substances 8942
 IAA 2980
 IBA 2980
 NAA 2980
- Bougainvillea shoot**
 anatomy 7939
 development 7939
- Bougainvillea soil**
 salinity
 plant, tolerance 2161
 sodium, chlorine 2161
- Boxwood**, organic acids, content, seasonal
 variations 3926
- Boysenberry**, insecticides, residues, fruit,
 endosulfan 5812
- Boysenberry diseases**, virus, annual report,
 Canada 2669
- Brachiaria* spp.**, as weeds, cucumber and
 gherkin 626
- B. spp.***, as weeds, sugar cane 7236
- Brachycaudus helichrysi***
 almond pests 459
 control, artichoke, globe, pests 5905
- Brachyrhinus rugosistriatus***, strawberry
 pests 1076
- Brassaia* spp.**
 acaricides, injury 7024
 pests, mites, control 7024
- Brassica* spp.**
 fungicidal properties 9033
 as medicinal plants 9033
 as weeds, peach 4252
- Brassicas**
 breeding and selection, disease resistance,
 Plasmodiophora brassicae 3652
 chloroplast, number, photosynthesis
 8628
 diseases
 Plasmodiophora brassicae 7655
 annual report, Australia 5882
 resistance, breeding and selection
 3652
 Sclerotinia sclerotiorum, annual report,
 Australia 5882
 glycosides 8634
 growing, tunnels 1261
 herbicides, application, irrigation 603
 irrigation
 furrow, herbicides, application 603
 sprinkler, herbicides, application 603
 mulching, plastic 4378
 pests, various, control 5928
 photosynthesis, chloroplast, number
 8628
 proteins, content 4941
 seed, treatment, fungicides 3622
 soil, cultivation 4378
 weed control 5680
 herbicides, application, irrigation 603
- Brazil**, pineapple, growing 9195
- Brazil nut pests**, review, Bolivia 5671
- Bremia lactucae***
 assessment methods, lettuce diseases
 5165
 infection process, lettuce diseases 7632
 lettuce diseases, annual report, Irish
 Republic 1939
 resistance, lettuce diseases, annual report,
 UK 5149
 varietal resistance, lettuce diseases 1962,
 1964, 4404, 6787
- Brevicoryne brassicae***
 brassicas, pests, annual report, German
 Federal Republic 8579
 brussels sprouts pests 147, 4428
 cabbage pests 4428
 annual report, UK 1934
 predators, cabbage pests 8624
- Brevicoryne brassicae* contd.**
 resistance, brussels sprouts pests 1697,
 3666
- Brevipalpus californicus***, predators, citrus
 pests 1489
- B. phoenicis***
 control, tea pests 8274
 tea pests 4898
- B. spp.***, tea pests 5663
- Britoa* spp.**, growing, tropical America 377
- Bromeliads**
 annual report
 Belgium 8835
 Netherlands 6126
- Bromine**
 content
 fruit, soil fumigation, methyl bromide,
 tomato 8789
 leaf, soil fumigation, methyl bromide,
 tomato 8789
 soil, fumigation, methyl bromide,
 gerbera 5394
 vegetables, annual report, German
 Federal Republic 8579
 determination, cacao 1553
- Brontispa longissima***, coconut pests 2444
- Broussonetia* spp.**, cytology 1378
- Browallia* spp.**, air pollution, sulphur
 dioxide, ethylene, injury 6132
- Brunnera* spp.**, propagation, rhizome 4613
- Brunsvigia* spp.**
 cytology 6182
 taxonomy, cytotoxonomy 6182
- Brussels sprouts**
 annual report
 Belgium 8578
 Irish Republic 1939
 Malawi 8580
 Netherlands 5151
 UK 598, 1934, 1936–1937, 3610,
 3613–3614, 4365, 5149, 5154
 USA 4368
 cadmium, determination 4389
 cuticle, development, annual report, UK
 1938
 defoliation, branching 8631
 grading, mechanical, equipment 4434
 growing
 industrial-scale production, Germany
 1987
 for processing 7646
 harvesting 4416
 economics 8635
 mechanical 8635
 equipment 2764, 4434
 methods compared 8635
 pre-picking, sprout, size 142
 time of
 planting, spacing, time 5886
 sowing, dates 5886
 topping 7646
 herbicides, injury, haloxydine 7651
 insecticides, residues, determination,
 monocotrophs 7302
 lead, determination 4389
 nutrient absorption, lunar materials 4380
 organic acids 6783
 planting
 spacing 4416, 7646
 sprout, size 142
 pollination
 electrical potential 1175
 mechanism 152
 proteins, determination, electrophoresis
 4384
 sprout
 size
 harvesting, pre-picking 142
 planting, spacing 142
 topping 142
 storage 229
 topping
 chemical, annual report, Canada 2734
 early harvesting 7646
 growth substances 5932
 sprout, size 142
 weed control 7650–7652
- Brussels sprouts diseases**
Alternaria brassicae, varietal resistance
 4420
Erwinia carotovora, varietal resistance
 4420

Brussels sprouts diseases *contd.*

- Erysiphe cruciferarum*, assessment methods 5165
- Peronospora brassicae*, varietal resistance 4420
- Plasmodiophora brassicae* 5194, 7655
- virus, annual report, UK 5153
- Xanthomonas campestris*, varietal resistance 4420

Brussels sprouts disorders, internal browning, calcium deficiency 4424**Brussels sprouts growth substances**

- branching, GA 8631
- endogenous, buds 150
- responses, aminozide 5932
- stopping, aminozide 5932

Brussels sprouts nutrition

- calcium, deficiency, internal browning 4424
- nitrogen, annual report, UK 5884
- phosphorus, potassium 2739

Brussels sprouts pests

- Brevicoryne brassicae* 147, 4428
- resistance 1697, 3666
- Delia platura*, infestation source 8720
- Heterodera schachtii* 5194
- Myzus persicae* 147
- resistance 1697

Brussels sprouts seed

- germination, pelleted seed 3623
- sowing, dates 5886
- treatment, pelleted 3623

Brussels sprouts shoot

- growth
- defoliation 8631
- growth substances 8631

Brussels sprouts varieties 4371

- annual report, UK 5885
- comparative trials 4419
- Belgium 4416
- disease resistance
- Alternaria brassicae* 4420
- Erwinia carotovora* 4420
- Mycosphaerella brassicicola*, annual report, UK 4366
- Peronospora brassicae* 4420
- Xanthomonas campestris* 4420
- Netherlands 3653

Bryobia arborea, population studies,

- fungicides, apple pests 5737

B. rubrioculus, control, apple pests 7391**Bud**

- axillary, meristem, anatomy 2912
- terminology, fruit trees and plants 4154

Budding

- bud wood, certification, India, citrus 8058
- budwood, treatment, mutagens, peach 6635
- double-shield, apple 6532
- height, apple propagation 4176
- on mother plant, citrus 4789
- relative humidity, rose propagation 5475
- seedling rootstocks in seed-bed, apple 7346
- shield
- bougainvillea 7940
- rose 8951
- Ziziphus mauritiana* 9281
- T, rose 8951
- temperature, rose propagation 5475
- time of
- cashew 9146
- persimmon 8115
- Ziziphus mauritiana* 9281
- tunnels, plastic, rose propagation 5475

Buddleia, annual report, Netherlands 4604**Bulbs**

- annual report, USA 3835
- cleaning, annual report, Netherlands 1314
- diseases
- Botrytis tulipae* 3864
- in forced crops 6165
- Fusarium oxysporum* 3864
- disorders, in forced crops 6165
- economics, Netherlands 2220
- forcing
- media
- bark, annual report, UK 6483
- pine bark 880
- rooms 6165
- growing, book 8882

Bulbs *contd.*

- growth phases 7912
- heat treatment 1690
- pests
- Ditylenchus dipsaci* 3864
- Eumerus strigatus* 7905
- E. tuberculatus* 7905
- Merodon equestris* 7905
- Pratylenchus* spp. 3864
- Trichodorus* spp. 3864
- sheds, annual report, Netherlands 5
- storage
- temperature
- annual report, UK 3834
- forcing
- narcissus 4663
- tulip 4663

Bulgaria

- apple varieties, comparative trials 5722
- bean (*Phaseolus*), growing, book 8670
- crops, grapevine 1079

Bullfinches, protection against, pear pests 86**Bupleurum aureum**, morphology 5520**Bursera delpechiana**

- flower, biology 8992
- fruit, oil 8994
- growing, India 8994
- B. schlehtendalii*, lignans 7101

B. spp.**diseases**

- Botryodiplodia theobromae* 8993
- Cercospora burserae* 336, 8993
- die back 336

Burseraceae, terpenes, survey 8971**Buxus microphylla**, alkaloids, content 9013**B. wallichiana**, organic acids, content 1451**Byturus tomentosus**

- raspberry pests, annual report, UK 1855, 3514
- Rubus* spp., pests, annual report, UK 1856

Cabbage

- amino acids, content, dormancy 8632
- annual report
- Austria 114
- Belgium 4363
- Canada 1944, 2734, 5883
- German Federal Republic 7599, 8579
- Irish Republic 1939
- Netherlands 1132
- New Zealand 5152
- Sabah 8582
- St. Lucia 8577
- UK 1934, 1937, 4365
- USA 1935, 4367, 8585

anthocyanins

- biosynthesis
- ethylene 8630
- growth substances 8630
- red light 8630

bactericides

- absorption, streptomycin 6849
- application
- adjuvants 6849
- surfactants 6849
- translocation, streptomycin 6849
- bolting, varietal resistance 4418
- breeding and selection 4417
- annual report, Yugoslavia 3619
- cadmium, determination 4389
- carbon dioxide injury 6782
- climate, disease incidence, *Peronospora parasitica* 8622
- dormancy, amino acids 8632
- drought, disease incidence, *Peronospora parasitica* 8622

ethylene

- pigments, biosynthesis 3668
- production
- growth substances 8630
- red light 8630
- treatment, plant, anthocyanins, biosynthesis 8630
- fasciation, seed plants 8612
- frost
- injury, disease incidence 146
- protection, chemical 5924
- growing
- in frames, plastic 2738
- media, compared 7605
- peat 7605
- nutrition 7604

Cabbage *contd.*

- growing *contd.*
- tunnels 2758
- herbicides
- Butisan, seedling, emergence 6795
- Mesoranil, seedling, emergence 6795
- tolerance, Ramrod, Semeron 3662
- hybrids 3655
- disease resistance, *Xanthomonas campestris* 5188
- insecticides
- injury 2123
- residues
- arsenic 3329
- endosulfan 2124
- leaf, monocrotophos 615
- plant
- carbofuran 8627
- determination 3330
- irradiation, gamma rays, seed, treatment 5921
- irrigation
- green manuring 1165
- plant nutrition 5191
- lead
- determination 4389
- atomic absorption spectrophotometry 6784
- residues 4936
- light
- ethylene production, inhibition 8630
- far red, photosynthesis 7806
- pigments, biosynthesis 3668
- red
- anthocyanins, biosynthesis 8630
- photosynthesis 7806
- mulching, plastic 2758
- mutants 3651
- nitrite, toxicity 5893
- nutrient absorption, lunar materials 4380
- nutritional value 4388
- organic acids, biosynthesis 4432
- photosynthesis
- annual report, Australia 6769
- far red light 7806
- red light 7806
- pigments
- biosynthesis
- ethylene 3668
- light 3668
- pollen, size, viability 2763
- pollination, electrical potential 1175
- proteins 143
- content, plant nutrition 143
- determination, electrophoresis 4384
- respiration, plant, heat production, storage 1148
- rhizosphere, micro-organisms, phosphorus nutrition 8620
- seedling raising, methods compared 4421
- soilless culture 4379
- storage, respiration, heat production 1148
- temperature, disease incidence, *Peronospora parasitica* 8622
- weed competition 1981
- weed control 612, 1948, 1982, 3661-3662, 5190, 6028, 6778, 6795
- methods compared 8618
- winter hardiness
- sugars, content 7662
- varietal resistance 4418

Cabbage, abyssinian, pollen, size, viability 2763**Cabbage, chinese**

- amino acids, metabolism 5933
- annual report, UK 8584
- ascorbic acid, content, varietal differences 3663
- diseases
- cabbage yellows, incidence 614
- turnip yellow mosaic virus 1169
- virus
- annual report, UK 5153
- leaf structure 1410
- growth chambers
- leaf production 8617
- plant composition 8617
- growth substances, plant, composition, GA 1179
- insecticides
- residues 3328
- arsenic 3329

- Cabbage, chinese** *contd.*
insecticides *contd.*
residues *contd.*
plant, methomyl 2507
lead, residues 4936
leaf, structure 1410
nutrition 141
pectins, metabolism 5933
plant, composition, growth substances,
GA 1179
planting, v direct sown 3663
pollen, size, viability 2763
seed
heat damage 5189
sowing, dates, Czechoslovakia 141
soil, temperature, disease incidence 614
sugars, content, growth substances, GA
1179
- Cabbage, chinese, diseases**
Fusarium oxysporum, f. *conglutinans*,
interaction, turnip mosaic 8621
turnip mosaic, interaction, *Fusarium*
oxysporum, f. *conglutinans* 8621
- Cabbage, chinese, nutrition**
nitrogen 3663
phosphorus, soil analysis 7629
sulphur 4423
deficiency 4423
- Cabbage, chinese, seed**
amino acids, content, ripening 8633
development, amino acids, content 8633
sowing, dates, annual report, German
Federal Republic 7600
- Cabbage, chinese, varieties**
bolting resistance 8615
comparative trials 8615
disorder resistance 8615
plant composition 3663
- Cabbage diseases**
Alternaria brassicae, varietal resistance
4420
Aphanomyces raphani, infection process
7654
Botrytis cinerea, resistance, proteins,
metabolism 5935
B. spp., control, annual report, German
Federal Republic 7600
Erwinia carotovora, varietal resistance
4420
Peronospora brassicae, varietal resistance
4420
P. parasitica
climate 8622
drought 8622
temperature 8622
Phoma lingam 4425
Plasmiodiophora brassicae 5193, 7655
growth substances, endogenous 8623
soil moisture 6797
soil pH 6797
spore numbers 6797
varietal resistance 5920, 7640
Pseudomonas cichorii, frost, injury 146
P. maculicola, frost, injury 146
P. marginalis, frost, injury 146
P. solanacearum, resistance 2760
P. syringae, resistance 2760
Sclerotinia sclerotiorum, control 7656
virus, annual report, UK 5153
Xanthomonas campestris
host-pathogen relationships 1985
hybrid resistance 5188
resistance 2760
varietal resistance 4420
X. malvacearum, resistance 2760
X. vasculorum, resistance 2760
- Cabbage disorders, spotted necrosis** 7664
- Cabbage growth substances**
anthocyanins, biosynthesis, inhibition,
IAA 8630
endogenous, root, diseased plants 8623
plant
quality, 2,4-D 8616
weight
2,4-D 8616
GA 8616
NOA 8616
- Cabbage leaf**
composition, ascorbic acid 143
nutrient absorption
iron
surface wax 1136
surfactants 1136
- Cabbage leaf** *contd.*
nutrient absorption *contd.*
manganese
surface wax 1136
surfactants 1136
sugars, content, seasonal variations 7662
wax
biosynthesis, inhibition, EPTC 1136
removal, methods, nutrient absorption
1136
- Cabbage nutrition**
boron 1167
manganese nutrition 1167
molybdenum nutrition 1167
calcium
absorption 5192
soil analysis 5192
green manures
irrigation 1165
types compared 1165
iron
application, foliar, surfactants 1136
leaf, absorption, surfactants 1136
manganese 1167
application, foliar, surfactants 1136
boron nutrition 1167
leaf, absorption, surfactants 1136
molybdenum nutrition 1167
molybdenum 1167
boron nutrition 1167
manganese nutrition 1167
nitrogen 1166
leaf, composition 143
sources, compared 119
NPK 118, 5191
annual report, Zambia 8587
phosphorus 1166, 6032
absorption 145
availability 120, 8619
rhizosphere, micro-organisms 8620
sources 8619
potassium 1166, 6032
sulphur 6079
nitrogen metabolism 6079
- Cabbage pests** 3665
aphids 4383
Brevicoryne brassicae 4428
predators 8624
Contarinia nasturtii 1174
Evergestis forficalis 5195
Heterodera schachtii 1149
population studies 5927
soil fumigation 5927
H. trifolii 3317
Hylemya brassicae 1173–1174
Lygus rugulipennis 4429
Mamestra brassicae 5195
Meloidogyne hapla 2761
M. spp., soil fumigation 7801
Pieris rapae 1172
biological control 1172, 4427, 7657
control 7657
P. spp. 5195
Plutella maculipennis 7658
control 6798, 8626
P. xylostella 5195
biological control 4427
Spodoptera frugiperda, biological control
4427
Trichoplusia ni 1172, 5196, 5929
biological control 1172, 4427, 7657
control 7657
varietal resistance 5919
various, control, annual report, Australia
7596
- Cabbage plant**
composition 1166
organic compounds, nitrogen, sources
119
seed, treatment, gamma rays 5921
temperature, measurement 2758
weight
plant treatment, *Actinomyces*
griseoruber extracts 6792
seed treatment, *Actinomyces*
griseoruber extracts 6792
- Cabbage root, growth** 1147
- Cabbage seed**
germination
inhibition, copper 6078
pelleted seed 3623
quality, standards, annual report, Italy
6771
- Cabbage seed** *contd.*
sowing
dates 4421
direct v. transplanting 611
treatment
Actinomyces griseoruber extracts 6792
boron 6078
copper 6078
fungicides, benomyl 4425
gamma rays 5921
growth substances 8616
heat 4425
manganese 6078
molybdenum 6078
pelleted 3623
zinc 6078
- Cabbage soil**
fumigation
Meloidogyne spp., thiazone 7801
nematode control 5927
moisture, disease incidence 6797
pH, disease incidence 6797
- Cabbage varieties** 4371
annual report
Sarawak 3609
UK 598, 3610, 3613, 5149
autumn harvesting 5187
bolting resistance 4418
comparative trials 7641
Ghana 7642
disease resistance 614
Alternaria brassicae 4420
Erwinia carotovora 4420
Peronospora brassicae 4420
Plasmiodiophora brassicae 7640
Xanthomonas campestris 4420
early harvesting 4421
January King, annual report, UK 5885
report, Sri Lanka 2733
soilless culture, Bulgaria 4379
winter hardiness 4418
- Cacao**
annual report
Ghana 7177
Nigeria 4035
Sabah 9135
Sarawak 4036
Trinidad and Tobago 9136
Venezuela 6391
breeding and selection 3181, 4838–4839,
6393
disease resistance 1548
Ceratocystis fimbriata 8131
Phytophthora palmivora 9139
haploid clones 9138
clones, comparative trials, Indonesia
4840
economics, Ghana 6392
embryology 4841
enzyme activity, bean, fermentation 4048
epiphytes, fungi, *Marasmius scandens*
823
growing
as an intercrop
coconut, annual report, Jamaica
4851
oil palm, annual report, Nigeria
9181
growth, habit, growth substances 8137
herbicides
injury
dalapon 8134
diuron 8134
MSMA 8134
plant sensitivity 2442
trunk, diameter 2442
humidity, relative, disease incidence,
Verticillium dahliae 7182
hybrids, comparative trials 8132
light, intensity, pest incidence, *sahlbergella*
singularis 2443
phenolic compounds, content, disease
resistance, *Ceratocystis fimbriata*
9140
planting
methods compared 9141
spacing 8133
pollination
artificial, seed production 3180
Forcipomyia spp. 2445
insects, breeding sites 5612
polyembryony 4842

Cacao contd.

- products and by-products
 - butter 3186
 - pod jelly 1554
 - various, animal fodder 5614
- rainfall, fruit, set 1549
- replanting, economics 5609
- report, FAO 4046
- research, Ghana 5608
- respiration, pod 384
- shade 9141
- disease incidence
 - Phytophthora palmivora* 9141
 - Verticillium dahliae* 7182
- pest incidence, *Sahlbergella singularis* 2443
- statistical, design of trials 9137
- temperature
 - fruit, set 1549
 - pod, fatty acids 3186
- transplanting v. direct sown 7179
- water relations 4047
- weed control 2442, 8134
 - high density planting 8133
 - review 8120
- yield, estimation, sampling 1547
- Cacao bean**
 - bromine, determination 1553
 - composition, seasonal variations 5613
 - fatty acids
 - determination, ion exchange chromatography 9144
 - separation 4049
 - fermentation, enzyme activity 4048
 - pectins 4849
 - pigments 5691
 - quality, seasonal variations 5613
 - shelling, sweatings collection 4050
 - sugars, content 2446
- Cacao bud**, dormancy, breaking, growth substances 8137
- Cacao diseases**
 - Ceratoystis fimbriata*
 - resistance
 - breeding and selection 8131
 - phenolic compounds, content 9140
 - Ceratoystis fimbriata*, varietal resistance 1548
 - control, economics, West Africa 3182
 - Macrophoma* spp. 4845
 - Marasmius perniciosus*, hybrid resistance 8132
 - M. spp.* 823
 - Oncobasidium theobromae* 3184
 - Phytophthora palmivora* 3182, 4846
 - alternative host, banana 830
 - host reactions 8136
 - incidence 3183
 - nursery stock 8135
 - pod anatomy 1552
 - resistance, breeding and selection 9139
 - review 386
 - shade 9141
 - P. spp.*, planting density 8133
 - swollen shoot 4844, 5610
 - swollen shoot virus 3182
 - Ghana, historical review 1550
 - vectors 1551
 - Trachysphaera fructigena*, incidence 4847
 - various, Togo 5599
 - Verticillium dahliae* 387, 7182
 - virus, unspecified 385
- Cacao disorders**
 - cherelle wilt
 - pod composition 384
 - rainfall 1549
 - temperature 1549
 - various, Togo 5599
 - white spot 6395
- Cacao fruit**
 - drop 2445
 - maturity, soil, drainage 4843
 - set
 - pollination 2445
 - rainfall 1549
 - temperature 1549
- Cacao growth substances**
 - biosynthesis, cherelle wilt 384
 - bud dormancy, breaking, GA 8137
 - shoot
 - growth
 - chlormequat 8137

Cacao growth substances contd.

- shoot contd.
- growth contd.
 - GA 8137
- Cacao nutrition** 5611
 - calcium, soil analysis, soil pH 7180
 - magnesium, soil analysis, soil pH 7180
 - nitrogen
 - leaf litter analysis 7181
 - soil analysis 7181
 - NPK
 - soil analysis 7180
 - soil pH 7180
 - potassium, soil analysis, soil pH 7180
 - sulphur, leaf analysis 3173
- Cacao pests** 1696
 - Amblyopelta theobromae* 2444
 - ants 6394
 - birds, control, review 4830
 - Contheila rotunda*, alternative hosts 9156
 - control, economics, West Africa 3182
 - Distantiella theobroma* 3182
 - population studies 9143
 - Glenea aluensis* 2444
 - G. lebeuieri* 2444
 - Helopeltis claviger* 2444
 - insects, control, review 1532
 - Lasiopus cilipes* 3185
 - Lordops aurosa* 3185
 - Maecolaspis ornata* 3185
 - mealybugs, virus vectors 1551
 - Naupactus bondari* 3185
 - N. spp.* 3185
 - Pansecta teleturga* 2444
 - Pantorhytes* spp. 2444
 - Pseudodoniella typica* 2444
 - rats, damage, disease incidence, *Trachysphaera fructigena* 4847
 - review, Bolivia 5671
 - rodents 7170
 - Sahlbergella singularis* 3182
 - incidence 2443
 - population studies 9143
 - survey, Brazil 4848
 - Symphylites* spp. 2444
 - various, Togo 5599
 - Xyleborus* spp. 2444
- Cacao pod**
 - anatomy, disease resistance, *Phytophthora palmivora* 1552
 - composition
 - carbon 384
 - nitrogen 384
 - fatty acids, content, temperature 3186
- Cacao propagation**, nurseries, nutrition 5611
- Cacao root**
 - anatomy 3172
 - systems, soil types 9142
- Cacao seed**
 - production, pollination 3180
 - sowing, direct v. transplanting 7179
 - treatment, fungicides, kocide 8135
- Cacao shoot**, growth, growth substances 8137
- Cacao soil**
 - drainage, crop maturity 4843
 - moisture 4047
 - pH, plant nutrition 7180
 - types, root distribution 9142
- Cacao varieties**
 - annual report, Sri Lanka 3171
 - disease resistance, *Phytophthora palmivora* 4846
 - disease resistance, *Ceratoystis fimbriata* 9140
 - growth studies 7183
 - Latin America 7178
- Cacoecia podana**
 - apple pests 5738
 - pear pests 5738
- Cacti**
 - diseases
 - Botrytis cinerea* 2267
 - Cylindrocarpum olidum* 2267
 - Drechslera cactivora* 2267
 - Fusarium oxysporum* 2267
 - control 8921
 - Phytophthora* spp., control 8921
 - Pythium* spp., control 8921
 - Rhizoctonia solani* 2267

Cacti contd.

- photoperiodism, annual report, USA 8834
- seed, treatment, fungicides 8921
- Cadmium**
 - absorption
 - calcium nutrition, radish 4437
 - radish 4437
 - determination
 - apple 4389
 - fruit 4389
 - vegetables 4389
 - toxicity, cucumber and gherkin 157
- Caesalpinia tinctoria**, seed, amino acids 6236
- Caesium**, absorption, reduction, clinoptilolite, contaminated soils, bean (*Phaseolus*) 2789
- Caffeine**, content, leaf, varietal differences, tea 7271
- Calacarus carinatus**, tea pests, annual report, India 1657
- C. citrifolii**, banana pests 6388
- Caladium** spp.
 - diseases, dasheen mosaic 2975
 - pests, annual report, USA 4367
- Calamintha suaveolens**, essential oil 4738
- Calamondin**
 - ethylene
 - fruit, abscission 8084
 - interaction, growth substances 8084
 - tissue culture, shoot, media 3103
- Calamondin fruit**
 - abscission
 - ethylene 8084
 - growth substances 8084
 - acidity, reduction, chemicals 4021
- Calamondin growth substances**, interaction, ethylene, cycloheximide 8084
- Calamondin pests**, *Geococcus coffeae*, annual report, USA 2375
- Calamondin propagation**, shoot, tissue culture 3103
- Calathea makoyana**, pests, nematodes, annual report, Belgium 8835
- C. spp.**, propagation, annual report, Belgium 5386
- Calceolaria fruit**
 - development 277
 - morphology 277
- Calceolaria growth substances**, retardants, Pydanon, annual report, German Federal Republic 7843
- Calceolaria seed**
 - development 277
 - morphology 277
- Calcium**
 - absorption
 - aluminium nutrition
 - apple 5730
 - bean (*Phaseolus*) 5974
 - apple 5730
 - cucumber and gherkin, annual report, German Federal Republic 7599
 - fertilizers compared, spinach 5903
 - fruit
 - apple, annual report, Netherlands 4956
 - set, mandarin and tangerine 3111
 - orange 6342-6343
 - orange nutrition 7135
 - peat pH, chrysanthemum 6145
 - root, mechanism, tomato 4561
 - rootstocks, plum 2657
 - tomato, annual report, German Federal Republic 7599
 - vegetables 5192
 - amino acids, absorption, root, pea 1239
 - application
 - foliar
 - bitter pit, apple disorders 1796
 - interaction, growth substances, bitter pit, apple 1796
 - fruit, disorder control, internal breakdown, apple 3432
 - with plant protectants, apple 4990
 - boron absorption, mandarin and tangerine 6344
 - boron nutrition, tomato, annual report, Sabah 8582
 - cadmium absorption, radish 4437
 - cell wall, composition, pea 7735, 8730

Calcium contd.

- content
 - aluminium nutrition, bean (*Phaseolus*) 5974
 - biennial bearing, apple 970-971
 - copper nutrition, coffee 393
 - disease incidence, grapevine 1913
 - flower, peach 6631
 - fruit
 - disorders
 - apple 1771
 - orange 5556
 - pear 3493
 - nitrogen nutrition, apple 4972
 - peach 6631
 - respiration, apple 1771
 - tomato grafted on potato 8795-8796
 - zinc nutrition, apple 2605, 5011
 - fruit disorders, pear 1031
 - irradiation resistance, pea 1241
 - leaf
 - apple 6553
 - bean (*Phaseolus*) 2010
 - drought
 - sugar cane 2474
 - tomato 2474
 - flooding
 - sugar cane 2474, 8200
 - tomato 2474
 - nitrogen nutrition
 - apple 4972
 - blueberry 7515
 - phosphorus nutrition, coffee 4859
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
 - mother-plant treatment, turnip 1178
 - plant
 - diseases, tomato 7798
 - disorders, strawberry 4329
 - potassium nutrition, pea 5243
 - vegetables 8702
 - pod, bean (*Phaseolus*) 2010
 - potassium nutrition, orange 1478
 - root, nitrogen nutrition, tea 8270
 - shoot
 - root temperature, chrysanthemum 8863
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
 - soil, chlorosis, apple disorders 1741
 - tuber, tomato grafted on potato 8795-8796
 - zinc nutrition, grapevine 1912
- deficiency
 - blossom-end rot, tomato 7790
 - control measures, banana, annual report, Australia 9121
 - fruit disorders, apple 469, 2602-2603
 - internal browning, brussels sprouts 4424
 - mandarin and tangerine 8071
 - phosphorus nutrition, chrysanthemum 1332
 - symptoms
 - coffee 3198
 - light
 - far red, bean (*Phaseolus*) 7713
 - white, bean (*Phaseolus*) 7713
 - tomato 4567
 - tipburn, strawberry 4329
 - tomato 4567
 - tulip 1364
 - watermelon, annual report, German Federal Republic 7599
- determination, methods 8289
- disease incidence, lettuce 865
- disorder incidence
 - apple 5005
 - bitter pit
 - apple 8417
 - annual report, German Federal Republic 8315
 - lenticel rot, apple 4980
 - low temperature breakdown, apple, annual report, UK 8317
 - peach, annual report, Yugoslavia 3350
 - stalk desiccation, grapevine 5126
- enzyme activity, vegetables, annual report, UK 8584
- essential oil, content, chamomile nutrition 3054
- fluorine toxicity, tomato 6932

Calcium contd.

- fruit
 - bunch size, grapevine - 593
 - cell wall permeability, apple 8417
 - colour, apple 4980
 - composition
 - cherry 69
 - orange 370
 - disorders
 - apple 947, 1793, 3431
 - annual report
 - UK 3347
 - USA 3348
 - pear 3493
 - quality
 - orange 3118
 - raspberry 5811
 - size
 - orange 370
 - orange nutrition 1478
 - storage life, strawberry, annual report, UK 7489
 - volatiles, production, apple 1793
 - leaf
 - abscission
 - bean (*Phaseolus*), annual report, USA 3616
 - tissue culture, bean (*Phaseolus*) 6843
 - colour, poinsettia 6219
 - leaf analysis
 - apple 3402
 - banana 9131
 - carrot 6109
 - citrus 1484
 - coffee 1570, 3198
 - mango 5631
 - orange nutrition 1478
 - peach nutrition 1018
 - petiole analysis compared, grapevine 8551
 - sugar cane 412
 - metabolism
 - annual report, Belgium 902
 - internal breakdown, apple 4221
 - petiole analysis, leaf analysis compared, grapevine 8551
 - phosphorus absorption, tomato 6911
 - phosphorus nutrition, mandarin and tangerine 9083
 - photosynthesis, citrus 9100
 - placement
 - apple nutrition 40
 - methods compared, root growth, apple 8377
 - plant, manganese content, pear 3492
 - plant analysis, sugar cane 6437
 - potassium nutrition, mandarin and tangerine 9083
 - replanting, peach 1821
 - requirements, vegetables 4381
 - salinity damage, celosia nutrition 727
 - soil analysis, soil pH, cacao 7180
 - sources, compared, mandarin and tangerine 7137
 - toxicity, poinsettia nutrition 282
 - translocation
 - bean (*Phaseolus*) 2028
 - crystal formation, apple 4221
 - growth substances, apple 961
 - temperature, bean (*Phaseolus*) 2028
 - transpiration, apple 1775
 - Yucca* spp., annual report, Netherlands 6962
 - zinc nutrition, orange 8073
 - Caliroa cerasi*
 - biological control
 - fruit trees and plants, pests 31
 - pear pests 5051
 - Callicarpa macrophylla*, terpenes, content 2355
 - Callistephus* spp., growing, as pot plants, annual report, Canada 8836
 - Callosobruchus chinensis*, resistance, bean (*Phaseolus*) pests 182
 - Calluna* spp.
 - breeding and selection, annual report, Netherlands 4604
 - growing 7040
 - Calocarpum* spp., growing, USA 1531
 - Calochortus* spp., tuliposides 8908
 - Calonectria kyotensis*
 - control, tea diseases 9278

Calonectria kyotensis contd.

- tea diseases 4109
- C. theae*
 - azalea diseases 2287
 - varietal resistance, azalea diseases 7943
- Calophyllum inophyllum*, glycosides 3069
- Calopogonium caeruleum*, as a cover crop, oil palm 7209
- Calsaria* spp., as weeds, tea 9272
- Camellia*
 - breeding and selection, chimeras 315
 - flowering, date, temperature 7033
 - genetics, chimeras 315
 - growing, in containers, weed control 4614
 - herbicides
 - injury
 - dichlobenil 2986, 4614
 - EPTC 2986
 - trifluralin 2986
 - temperature
 - flower bud, initiation 7033
 - flowering, date 7033
 - weed control 2986, 4614
- Camellia* bud, initiation, annual report, UK 4605
- Camellia* diseases
 - Glomerella cingulata*, resistance 2981
 - Penicillium* spp. 4686
- Camellia* flower, bud initiation, temperature 7033
- Camellia* pests, annual report, USA 1441, 6129
- Camellia* propagation
 - cuttings
 - media 3838
 - mist, annual report, Irish Republic 7032
- Camellia* varieties, Daisy Eagleson, graft chimera 1385
- Cameroon, banana, production and trade 5601
- Campanula*
 - breeding and selection 7880
 - fungicides, growth reduction, benomyl 6160
 - hybrids, cytology 7880
 - light, supplementary, growth 6160
- Campanula* growth substances
 - injury, chlormequat 6160
 - retardants
 - aminozide 6160
 - chlormequat 6160
- Campanula* spp., growing, as pot plants, annual report, Canada 8836
- Campomanesia* spp., growing, tropical America 377
- Campoplex* spp., biological control of, *Aegeria myopaeformis* 3409
- Campsis* × *tagliabuana*, taxonomy 320
- Canada
 - fruit trees and plants, varieties, register 5670
 - nuts, varieties, register 5670
- Cananga odorata*
 - essential oil
 - composition, determination 8990
 - nutrition, annual report, Sarawak 3933
- Candida* spp., leaf, micro-organisms, ozone, bean (*Phaseolus*) 6839
- Canna* spp.
 - diseases, *Curvularia uncinata* 4639
 - enzymes, content, leaf 5895
 - flower
 - development 5438
 - morphology 5438
 - plant, morphology 5439
- Caper diseases, vein banding 6248
- Capitophorus horni*
 - biological control
 - fungi, artichoke, globe, pests 3635
 - Hymenoptera, artichoke, globe, pests 3635
- Capitulum*, tissue culture, pyrethrum 9012
- Capsella bursa-pastoris*
 - as weeds
 - lettuce 603
 - vegetables, herbs 6777
- C. spp.*, as weeds, cabbage 1981

Capsicum

- amino acids
 - content
 - fruit, phosphorus nutrition, potassium nutrition 6039
 - leaf, phosphorus nutrition, potassium nutrition 6039
 - disease incidence 2846
- annual report
 - Australia 1133, 6769
 - Austria 114
 - Canada 2734, 5883
 - Cyprus 3604
 - Israel 3608
 - Malawi 8580
 - Netherlands 1135, 5151
 - Sarawak 3609
 - UK 3613, 6774
 - USA 1130, 1935, 3618, 4367, 5855
- bibliography 5319, 7967
- breeding and selection 1264, 2840, 5321
- annual report, USA 3616, 7601
- disease resistance 6053
- enzyme content 6895-6896
- Ethiopia 5322
- F₁ hybrids, annual report, USA 3617
- ornamental value 2934
- protein content 6896
- capsaicin
 - content, varietal differences 3779
 - determination 2103
- chlorophyll, content, plant nutrition 6892
- chloroplast, activity, leaf, size 6044
- enzyme activity
 - fruit
 - ripening 2100
 - storage 4543
 - temperature 4543
 - leaf, photosynthesis 6044
 - nitrogen, metabolism 8754
 - seed
 - ethylene 8758
 - fruit storage 6047
 - temperature 8758
- enzymes 6895
- leaf 5895
- essential oil, composition, determination 7066
- ethylene, production, fruit, storage 8758
- flowering 2098
- date, growth substances 4541, 5327
- growth substances 8756
- sequence 5326
- temperature 2850
- forcing
 - light, supplementary 2096
 - media compared 2096
- fruit, size, spraying, oil 3778
- fungicides, additives, Nu-Film 17, mancozeb 6043
- growing
 - Bulgaria 3620-3621
 - as a dye plant 2092
 - Ethiopia 4530
 - German Federal Republic 4530
 - under glass 1139, 4535
 - annual report, Irish Republic 1939
 - artificial illumination 877
 - economics 5156-5157, 5320
 - Hungary 5320
 - labour requirements 5156-5157
 - in greenhouses 6036
 - plastic 4536
 - Hungary 4530
 - as an intercrop, pineapple 9198
 - Israel 4530
 - Japan 4530
 - Netherlands 4530
 - peat 4535
 - under plastic 2499
 - fruit, set 6889
 - protected cultivation 2159, 5159
 - as a spice plant 2092
 - straw bales 1142, 4535
 - Tunisia 4369
 - UK 4530, 6036
- growth
 - apical dominance, growth substances 8757
 - seed position in fruit 6061
 - seed shape 6061
 - seed size 6061

Capsicum contd.

- growth phases 1263
- growth studies, inoculation, *Fusarium* spp. 6038
- harvesting
 - mechanical 4542
 - time of, spraying, oil 3778
- herbicides
 - disease incidence, diphenamid 2843
 - injury
 - linuron 667
 - prometryne 667
 - tolerance, dinitroanilines 1267
- irrigation
 - disease resistance 4538
 - virus 6053
 - drip, sprinkler 3624
 - fruit, set 6897
 - requirements, determination 4537
 - salinity problems 4376, 4537
 - sprinkler 4376, 6891
 - trickle 4376, 4537, 6891
- light
 - intensity 2095
 - disease resistance 4538
 - leaf, characters 2095
 - supplementary 2096
- medicinal properties 5168
- mulching
 - bitumen 6889
 - fruit, pigments 6037
 - paper, plastic coated 8747
 - plastic 4378, 4538, 6889
 - soil
 - moisture 6037
 - temperature 6037
- mutants, induction, grafting on *Datura stramonium* 2839
- nitrite, toxicity 5893
- nitrogen
 - content
 - fruit
 - phosphorus nutrition 8753
 - potassium nutrition 8753
 - leaf
 - phosphorus nutrition 8753
 - potassium nutrition 8753
 - disease incidence 2846
 - metabolism, photoperiodism 8754
 - nutrients, content 5890
 - as an ornamental plant 2934
 - phenolic compounds, content, plant, disease resistance, *Colletotrichum capsici* 5325
- photoperiodism
 - light, sources, compared 236
 - nitrogen, metabolism 8754
- photosynthesis
 - enzyme activity 6044
 - leaf growth 6044
 - root hydrostatic pressure 8755
- phytoalexins 7763
- pinching 3774
- planting
 - date 2842
 - spacing 1266, 2841, 8751
 - in groups 6897
 - systems 1266
 - time 4535
 - topping 2844
- pollination
 - artificial 2840
 - time from flowering, fruit, set 6045
- proteins
 - content
 - fruit
 - phosphorus nutrition 8753
 - potassium nutrition 8753
 - leaf
 - phosphorus nutrition 8753
 - potassium nutrition 8753
- pruning and training 6036
- pinching 3774
- report, Sri Lanka 2733
- respiration, fruit, storage 4543
- rhizosphere, micro-organisms, population, growth substances, chlortlurenol-n-hexylester, 2849
- seedling
 - raising, under plastic 5338
 - transport, containers, plastic 4375
- soilless culture
 - iron, sources 2845

Capsicum contd.

- soilless culture contd.
 - media 236
- spraying, oil, fruit, size 3778
- storage
 - cold 4543
 - chilling injury 6048
 - enzyme activity 6047
 - disorders, seed browning 2099
 - fruit, composition 6048
 - organic acids, content 4543
 - controlled atmosphere, relative humidity 8763
 - disorders, seed browning, controlled atmosphere 2099
 - temperature 8763
 - enzyme activity 6047, 8758
- temperature
 - fruit, development 2098
 - growth 2850
- terpenes, antifungal 7763
- tissue culture, bud 5326
- transpiration, root hydrostatic pressure 8755
- varieties
 - and strains 235
 - UK 6036
- vitamins, content 3339
- water potential, leaf, root hydrostatic pressure 8755
- water relations 4537
- root hydrostatic pressure 8755
- weed control 667, 680, 2843, 6777-6778, 6890, 8588
- review 6065
- Capsicum diseases**
 - bacterial wilt, varietal resistance 6888
 - Botrytis cinerea*
 - phytoalexins, production 1268
 - resistance 5324
 - Colletotrichum capsici*, host phenolic compounds, content 5325
 - Corynebacterium michiganense* 3776
 - Fusarium oxysporum*, f. *vasinfectum*, resistance 5324
 - F.* spp., seed treatment 6899
 - Leveillula taurica*, control 6042
 - mosaic, host anatomy 6894
 - Phytophthora capsici*
 - phytoalexins, production 1268
 - resistance, breeding and selection 4531
 - potato virus Y
 - varietal resistance 6041
 - vectors, *Myzus persicae* 6040
 - potato Y 2097
 - host amino acids, content 2846
 - host enzyme activity 2846
 - host nitrogen metabolism 2846
 - Rhizoctonia* spp., herbicides 2843
 - Stemphylium solani* 6043
 - tobacco etch 2847
 - vectors, *Myzus persicae* 6040
 - tobacco etch virus, varietal resistance 6041
 - tobacco mosaic 2097
 - Verticillium dahliae*
 - irrigation 4538
 - light intensity 4538
 - V.* spp., seed treatment 6899
- virus
 - plant density 2841
 - producing local lesions on tobacco 669
 - Venezuela 3775
 - yield reduction, irrigation 6053
- Xanthomonas vesicatoria*
 - host-parasite relationships, nitrogen metabolism 2848
 - host reactions 7794
 - varietal resistance 4532-4533
- Capsicum flower**
 - biology 6045
 - bud development 5326
 - sex, growth substances 8757
 - structure, growth substances 8757
- Capsicum fruit**
 - aldehydes, content 6048
 - amino acids, content, phosphorus nutrition, potassium nutrition 6039
 - ascorbic acid
 - content
 - nitrogen nutrition, soilless culture 2845
 - plant nutrition 6893

- Capsicum fruit** *contd.*
 ascorbic acid *contd.*
 content *contd.*
 ripening 7765
 varietal differences 7765
 capsaicin
 content
 phosphorus nutrition 8752
 potassium nutrition 8752
 determination 7764
 composition 3780, 6049
 amino acids 1269
 plant nutrition 6893
 development, temperature 2098
 extract, seed germination, vegetables
 2093–2094
 flavour, post-climacteric changes 2100
 number
 growth substances 8756
 mulching, paper, plastic coated 8747
 phytoalexins, production 1268
 pigments, mulching 6037
 pungent principles
 content, plant nutrition 8752
 determination 4544
 ripening
 planting systems 1266
 post-climacteric, composition
 2100–2102
 set 2098, 6897
 growing under plastic 6889
 time from flowering, varietal
 differences, India 6045
 size 1270
 growth substances 8756
 mulching, paper, plastic coated 8747
 sugars, content, plant nutrition 6893
- Capsicum growth substances**
 apical dominance, morphactins 8757
 flower
 sex, morphactins 8757
 structure, morphactins 8757
 flowering
 date
 aminozide 4541, 5327
 ethephon 4541, 5327
 GA 4541, 5327
 NAA 4541, 5327
 2,4-D 8756
 IBA 8756
 fruit
 number
 2,4-D 8756
 IBA 8756
 size
 2,4-D 8756
 IBA 8756
 interaction
 applied
 2,4-D, and endogenous 8756
 IBA, and endogenous 8756
 responses, chlormequat, review 8310
 rhizosphere, micro-organisms, population,
 chlorflurenol-n-hexylester 2849
- Capsicum leaf**
 amino acids, content, phosphorus
 nutrition, potassium nutrition 6039
 composition, amino acids 1269
 growth phases, nitrogen metabolism
 8754
- Capsicum nutrition** 1263
 boron, application, foliar 6892–6893
 copper, application, foliar 6892–6893
 fertilizer application, time of 1262
 iron, sources, soilless culture 2845
 major elements, plant analysis 4381,
 7760
 manganese, application, foliar 6892–6893
 minor elements, plant analysis 4381
 nitrogen 6038
 application, foliar, rhizosphere micro-
 organisms, population studies 6038
 leaf, colour 8752
 NPK 668, 5323, 7761
 phosphorus 8752
 amino acids, content 1269
 fruit
 amino acids, content 6039
 capsaicin, content 8752
 nitrogen, content 8753
 proteins, content 8753
 leaf
 amino acids, content 6039
- Capsicum nutrition** *contd.*
 phosphorus *contd.*
 leaf *contd.*
 nitrogen, content 8753
 proteins, content 8753
 potassium 7076
 amino acids, content 1269
 fruit
 amino acids, content 6039
 capsaicin, content 8752
 nitrogen, content 8753
 proteins, content 8753
 leaf
 amino acids, content 6039
 disorders 8752
 nitrogen, content 8753
 proteins, content 8753
 urea-metaphosphate 5323
- Capsicum, ornamental, varieties** 3859
- Capsicum pests**
 aphids 4383
Hemicycliphora parvana, control 6975
Hemitarsonemus latus 4539
Meloidogyne arenaria, host reactions
 7762
M. incognita, host reactions 7762
M. javanica, host reactions 7762
M. spp., control 6975
Myzus persicae 4540
 vectors
 potato virus Y 6040
 tobacco etch 6040
 nematodes, Brazil 9126
Ostrinia nubilalis 3777, 4540
Trichodorus christiei, control 6975
- Capsicum seed**
 germination
 irrigation 4376
 temperature 2093–2094
 potassium, sodium, molybdenum,
 manganese, iron, content 6059
 production
 fruit, size 6046
 harvesting, time of 6046
 sowing
 date 2842
 direct v. transplanting, Pakistan 666
 treatment
 capsicum fruit extract 2093–2094
 fungicides 3622
 hydroquinone, methylene blue,
 paranitrophenol, orthonitrophenol
 6899
 hypertonic salt solution, wafering 6061
 nutrients 6892
- Capsicum soil**
 cultivation 4378
 micro-organisms, monoculture 237
- Capsicum varieties** 1265, 4371
 ascorbic acid, content 7765
 capsaicin, content 3779
 comparative trials, Netherlands 8751
 disease resistance
 bacterial wilt 6888
 potato virus Y 6041
 tobacco etch virus 6041
 Xanthomonas vesicatoria 4532–4533
 economics, Hungary 1679
 enzymes, content 6895
 greenhouse 4535
 ornamental 2934
 Pakistan 666
 USSR 1942
- Capua reticulana**
 apple pests 5738
 pear pests 5738
- Caraway**
 bibliography 8974
 essential oil
 composition 325
 determination 7066
 content 8988
 growth, studies 6249
 insecticide, residues, dimethoate 326
 temperature, flower bud, initiation 6249
- Caraway flower, bud initiation** 6249
- Caraway fruit, histology** 7973
- Caraway seed**
 oil 8980
 sowing, date 4730
- Carbohydrates**
 biosynthesis
 Cucurbita spp. 5961
- Carbohydrates** *contd.*
 biosynthesis *contd.*
 propagation methods, grapevine 1092
 storage, tomato 8803
 temperatures, low, *Prunus laurocerasus*
 7060
 content
 biennial bearing, mango 3239
 bulb
 onion 7754
 shallot 6035
 carrot 8814
 disease resistance, *Deuterophoma*

 flower bud
 initiation, cauliflower and broccoli
 6800
 sex, melon (cantaloup and musk)
 8663
 frost resistance, citrus 3131
 fruit
 berry fruits 101
 citrus 9108
 grapevine 7595
 ripening
 banana 8127
 grapevine 8573
 growth substances, cauliflower and
 broccoli 7660
 leaf
 boron nutrition, guava 8161
 citrus 9108
 disorders, chrysanthemum 6972
 growth substances, grapevine 8569
 photoperiodism, okra 8749
 post-prune growth, tea 3283
 pruning and training, tea 8267
 seasonal variations
 apple 5010
 grapevine 1929
 plum 7478
 shoot, watercore, apple 8384
 storage, apple 5010
 temperature, okra 8749
 water relations, apple, annual report,
 Australia 6523
- metabolism**
 banana 9134
 biennial bearing, apple 6584
 bulb, storage temperature, tulip 7908
 darkness, bean (*Vicia*) 8710
 diseased plants, tomato 3803
 dormancy, rhubarb 7759
 drought injury, bean (*Phaseolus*) 7722
 fruit, growth substances, GA, grapevine
 3596
 fruiting relationships, apple 6579
 irradiation, gamma rays, post-harvest,
 banana 6390
 leaf
 almond 5773
 peach 5773
 light, bean (*Vicia*) 8710
 minor element nutrition, grapevine
 1113
 nitrogen nutrition, apple 39
 Phalaenopsis spp. 5458
 pruning and training, apple 3399
 seasonal variations
 apple 8403
 peach 3479
 rose 338
 storage in roots
 seasonal variations, apple 8403
 vegetables 5917
 storage in shoots, seasonal variations,
 apple 8403
 translocation
 Cucurbita spp. 5961
 flowers, cut 2296
 grapevine 1926
 pea 214
 sugar cane 4101
- Carbon**
 metabolism, light, blue 1673
 nitrogen balance, mushroom 8823
Rhizobium leguminosarum, growth, pea
 8716
- Carbon, activated**
 herbicides
 injury
 prevention
 strawberry 545

Carbon, activated *contd.*herbicides *contd.*injury *contd.*prevention *contd.*

vegetables 1140

Carbon dioxide

concentration

fruit

dehiscence

okra 7466

pecan 7466

tolerance

ornamental plants 6782

vegetables 6782

content, style cavity, lily 1363

evolution, *Kalanchoe* spp. 8920

fixation, darkness, insecticides, bean

(*Vicia*) 8710

fruit, astringency, persimmon 5594

injury

lettuce 1157, 5915, 6782

vegetables 6782

pollen, germination, lily 1363

pollen tube, growth, lily 1363

seed, treatment, ethylene, lettuce 1154

supplementary

bud break, rose 3921

chrysanthemum 272, 272

control systems, greenhouse 886

cucumber and gherkin 5216

from diesel exhaust, injury, vegetables

3625

flower

colour, rose 7949

size, rose 7949

flower bud, initiation, rose 3920

fruit

quality, tomato 4566

size, tomato 4566

greenhouse

application methods, annual report,

German Federal Republic 6481

flowers, annual report, USA 1315

natural gas burners 1688

tomato, annual report, Irish Republic

5150

vegetables, annual report, USA 1130

lettuce 3640

planting, spacing, chrysanthemum

6143

production, equipment 2497

seedling raising

kohl-rabi, 2880

tomato, 2880

tomato, annual report, Belgium 1131

vegetables, annual report, Netherlands

1135

uptake, mechanism, geranium 2508

uptake in darkness, Tillandsioideae 305

Carbon monoxide

metabolism

bean (*Phaseolus*) 1219

sugar cane 9261

Cardamoms

annual report, Sarawak 3933

bibliography 8974

essential oil 327

composition, determination 7066

determination 7974

growing 327

India 7068

research, India, review 7968

Cardamoms diseases

mosaic 6251

vectors 6251

Pentalonia nigronervosa 5489**Cardamoms pests***Pentalonia nigronervosa* 5489, 6252

fungal parasites 6253

virus vectors, mosaic 6251

Pratylenchus coffeae 8153**Carica candamarcensis**, diseases, mosaic,

resistance 9193

Carissa grandifloradiseases, *Rhizoctonia solani* 2269, 3002

soil

salinity

plant, tolerance 2161

sodium, chlorine 2161

Carissa *contd.***C. spp.**

propagation

cuttings

treatment

growth substances

IAA 1011

IBA 1011

sugars 1011

Carnation

annual report

Austria 265

Belgium 5386

Netherlands 6126-6127, 6961

UK 4605-4606, 4622

USA 3835

breeding and selection 711

flower, colour 268

bromine contents, soil, fumigation, methyl

bromide 5394

economics

Netherlands 6137

work study methods, annual report,

Netherlands 1314

flowering

light, supplementary 3839

pinching, date 2177

fungicides

injury

benomyl 714

ethazol 7851

metabolism, benomyl 715

persistence, benomyl 715

tolerance 269

translocation, benomyl 716

genetics, flower, colour 711

growing

economics, Netherlands 8854

under glass

economics 6137

varieties 2918

media

annual report, Belgium 8835

coal ash 8857

miniature varieties 6138

as pot plants, production 5390

for production throughout the year

6141

Saran house culture 8855

sub-tropics 8855

tunnels, plastic 5398

growth studies

seasonal variations

light 3840

temperature 3840

herbicides

injury

pyrazon 2921

RH315 2921

labour requirements 1330

growing 8854

light

artificial, cyclic and continuous

compared 2181

intensity 3840

supplementary

flowering date 3839

growth 3839

mutants, induction 6966

photoperiodism

flower, quality 6968

flower bud, initiation 5402, 6142.

flowering, date 6968

pigments, content, genetics 711

pinching 2177

planting

methods compared 2175

spacing, seed production 5397

time, seed production 6967

work studies 2175

potting composts, annual report,

Netherlands 6962

pruning and training, flowering 8856

report, USA 6130

respiration, flower, senescence 7852

shade, flowering 8856

soilless culture, nutrient solution,

concentration 5401

temperature

flower, quality 6968

flowering, date 6968

growth 3840

Carnation *contd.*

tissue culture

meristem 717

annual report, Italy 6960

shoot-tip 2919, 2923

stem, growth substances, treatment

7849

topping, flowering 8856

transport, vacuum cooling 2164

water potential, plant, nutrient solution,

concentration 5401

weed control 2921

Carnation diseases*Erwinia chrysanthemi*, enzyme activity

4619

etched ring virus

heat treatment 2920

shoot-tip culture 2920

flower breaking virus 2180

Fusarium oxysporum 716f. *dianthi* 5400

histology 4620

F. roseum, biological control,*Pseudomonas* spp. 2922*F. spp.* 714

mottle, transmission 7850

mottle virus 5399

heat treatment 2920

shoot-tip culture 2920

Phialophora cinerescens 715*P. spp.* 714*Pythium vexans*, control 7851

ringspot virus 5399

streak virus

heat treatment 2920

shoot-tip culture 2920

Carnation disorders, calyx splitting 4618**Carnation flower**

bud initiation, photoperiodism 5402,

6142

calyx splitting 4618

colour

genetics 711

seed, treatment 268

cut

carbohydrates, translocation 2296

economics 4608

ethylene treatment 2924, 4621

fluorine injury, tap water 2913

irradiation, ionizing, injury 604

packing, cooling 6969

preservatives 7852

fluorine injury mitigation 2913

production, planting, spacing 5398

senescence

respiration 7852

sugars, content 7852

storage 2182

vase life 4621

harvesting in bud 2182

petal numbers, genetics 711

quality

light, artificial 2181

photoperiodism 6968

soil heating 5402

temperature 6968

sugars, content, senescence 7852

Carnation flowering

date

photoperiodism 6968

temperature 6968

Carnation growth substances

assimilates

translocation

GA 6140

IAA 6140

endogenous, flower 6140

Carnation nutrition

boron, flower, calyx splitting 1325

general, deficiency diagnosis 2178

nitrogen, flower, calyx splitting 1325

NPK 4617

flowering 1325

Carnation pests, *Tetranychus* spp., annual

report, Denmark 3298

Carnation propagation

cuttings

meristem, nutrition 717

treatment, growth substances, SADH

713

meristem 5396

shoot, tissue culture, growth substances,

treatment 7849

Carnation propagation *contd.*

- shoot-tip culture, virus-free plants 1331, 2919–2920

Carnation seed

- production 6967
 - fruit, set, petal removal 5403
 - planting, spacing 5397
- sowing, dates, seed production 6967
- treatment, mutagens, flower, colour 268

Carnation soil

- fumigation
 - injury, methyl bromide 5394, 6139
- plant composition, bromine, methyl bromide 5394
- heating, flower, quality 5402

Carnation varieties

- annual report, USA 1441, 6129
- Bulgaria 2176
- comparative trials, annual report, USA 8834
- evaluation 8855
- greenhouse 2918
- for leis (garlands) 712
- miniature 6138
- Netherlands 5395
- sub-tropics 8855

Carnegiea gigantea*, diseases, *Poria carnegiae

- 6202

Carob diseases, *Pseudomonas ciccarae*

- 3984

Carob fruit, composition 3096**Carob pests, *Eumarchalia gennadii*,**

- biological control, annual report, Cyprus 3980

Carob varieties, register, USA 3356**Carotene**

- biosynthesis, environmental factors 21
- content
 - boron nutrition, spinach 126
 - environmental factors, carrot 5375
 - fruit 3339
 - growth substances, tomato 6094
 - Hippophae* spp. 6238
 - Sorbus aucuparia* 2665
 - varietal differences, black currant 8488
- irradiation, ionizing, post-harvest, mango 1595
- latitude, carrot 5678
- leaf
 - light, intensity, cucumber and gherkin 4459
 - seasonal variations, carrot 6946
 - spice plants 4728
- manganese nutrition, spinach 126
- molybdenum nutrition, lettuce 7630
- plant nutrition
 - lemon 3112
 - tomato 254
- root
 - beetroot 5172
 - carrot 5375, 8814
 - seasonal variations, carrot 6946
- storage, carrot 1308
- tropical spinach 6119
- vegetables 3339
 - water relations, tomato 254
- degradation, storage, lettuce 7636

Carotenoids, content, fruit, citrus, annual report, USA 8051***Carpobrotus* spp.**

- ground cover plants 710
- herbicides, injury 1323
- weed control 710

***Carposina niponensis*, forecasting, apple**

- pests 1757

Carrot

- amino acids, content, iron, tissue culture 1307
- annual report
 - Austria 114
 - Belgium 1131, 4363
 - Canada 1944, 2734, 3603, 5883
 - Cyprus 3604
 - German Federal Republic 7598–7599, 8579
 - Irish Republic 1939
 - Netherlands 6772, 8581
 - New Zealand 5152
 - UK 1934, 1937, 5154
 - USA 4367, 7601, 8585
- arsenic, content, insecticides, residues 1951

Carrot *contd.*

- breeding and selection 4587
- annual report, USA 3616
- root, colour 2138
- cadmium, determination 4389
- carotene
 - content
 - latitude 5678
 - leaf, seasonal variations 6946
 - root 8814
 - seasonal variations 6946
 - climate, yield 8814
 - colchicine treatment, proteins, metabolism 4591
 - coumarins
 - biosynthesis
 - disease resistance 2141
 - ethylene treatment 2141
 - drying 22
 - enzyme activity 1954
 - diseased plants 2897
 - inhibition 1305
 - root
 - ethylene treatment 2141
 - tissue culture 2140
 - tissue culture 694
- essential oil
 - content 7983
 - phytoene 2898
- ethylene
 - disease resistance 2141
 - enzyme activity, root 2141
- flavonoids 3340
- growing
 - in frames, plastic 2738
 - media, compared 7605
 - Nigeria 5371
 - peat 7605
 - nutrition 7604
 - under plastic
 - varieties 8808
 - weed control 7627
- polar regions, root, composition 5375
- symposium, Canada 8500
- tunnels, plastic 5166, 5373, 5373
- harvesting, mechanical, root, injury 6114
- herbicides
 - injury
 - chlorbromuron 7816
 - linuron 7816
 - prometryne 7816
 - plant, composition, prometryne 5376
 - residues, root, prometryne 5376
- insecticides
 - application
 - as emulsifiable concentrates, chlorpyrifos 2506
 - as granules
 - chlorpyrifos 2506
 - placement 5374
 - persistence, chlorfenvinphos 6942
 - residues
 - determination
 - chlorpyrifos 4142
 - monocrotophos 7302
 - plant, lead arsenate 1951
- irrigation
 - furrow 7815
 - sprinkler 116, 7815
- lead
 - content, insecticides, residues 1951
 - determination 4389
 - mulching, plastic 2895
- nematicides
 - pest population increase
 - Basamid 8811
 - Di-Trapex 8811
 - nitrite, toxicity 5893
- nucleic acids 4590
 - metabolism 226
 - growth substances, kinetin, tissue culture 1307
 - iron, tissue culture 1307
 - phosphorus, tissue culture 1307
- nutrient absorption
 - major elements 2896
 - minor elements 2896
- nutrients, content 5890
- photoperiodism, root, composition 5375
- pigments 8001
 - genetics 2138
- pollination, bees, seed production 5899

Carrot *contd.*

- proteins
 - content
 - iron, tissue culture 1307
 - plant, development 2894
 - metabolism, colchicine treatment 4591
- rainfall
 - disease incidence, *Alternaria* spp. 5166
 - protection, plastic 5166
- respiration
 - root
 - heat production, storage 1148
 - salinity, tissue culture 6944
 - storage 2744
 - tissue culture 4592
- seedling, growth, inhibition, *Coronilla varia* seed leachate 7625
- soiless culture, plant anatomy 6938
- storage
 - controlled atmosphere, disease incidence 695
 - growth substances
 - treatment
 - root colour 1308
 - root composition 1308
 - plastic bags 1308
 - quality, soil types 7820
 - respiration, heat production 1148
 - review 7612
 - rots
 - Erwinia* spp. 1308
 - Fusarium* spp. 1308
 - for seed production 692
 - temperature 6114
 - respiration 2744
- temperature, root, composition 8814
- tissue culture 121, 8001
 - annual report, UK 1938
 - cambial tissues, propagation, salinity tolerance 8812
 - cell suspension 1306, 7819
 - fatty acids, metabolism 8591
 - cells, enzyme activity 694
 - embryogenesis, oxygen concentration 4593
 - root 259–260, 1307, 2899, 6945
 - enzyme activity 694, 2140
 - respiration 4592
 - salinity 6944
 - tissues
 - growth substances, treatment 8813
 - light 8813
 - media 8813
 - photosynthesis 8813
 - vitamins, content 3339
 - washing, damage 6114
 - water relations, root 1223
 - weed control 2116, 3821, 5376, 6777, 6780, 7627, 7816–7817, 8809–8810
 - Digitaria* spp. 8809
 - Setaria* spp. 8809
 - windbreaks, plastic 5373

Carrot diseases

- Alternaria dauci*, incidence, Nigeria 5371

A. porri 693

A. radicina 2139

A. spp., incidence, Nigeria 5166

Centrospora acerina 6116

Ceratocystis fimbriata, resistance 2141

Phoma rostrupii, host enzyme activity 2897

Rhizopus stolonifer 695

Stemphylium botryosum 2139

S. radicinum, varietal resistance 4588

virus, incidence, German Federal Republic 6781

Carrot flower, male sterility 7812

Carrot growth substances

- nucleic acids, metabolism, tissue culture 1307

seed

- production, MH 6947
- quality, MH 6947
- size, MH 6947

storage

- BA
 - root colour 1308
 - root composition 1308

Carrot nutrition

- calcium
 - leaf analysis 6109
 - requirements 4381
- copper, seed treatment 6108

Carrot nutrition *contd.*

- magnesium, leaf analysis 6109
- major elements 2896
 - plant analysis 4381
- minor elements 2896
 - plant analysis 4381
- nitrogen
 - disease incidence 693
 - leaf analysis 6109
- NPK 118
 - annual report, UK 1936
- phosphorus
 - leaf analysis 6109
 - requirements 4381
 - root, shape 6941
- potassium, requirements 4381
- sulphur
 - leaf analysis 6109
 - requirements 4381

Carrot pests

- Paratylenchus* spp., soil treatment 8811
- Psila rosae* 5374
 - annual report, UK 3614
 - control 6942
- Trioxa viridula*, plant composition 6943

Carrot plant

- anatomy, soilless culture 6938
- composition, *Trioxa viridula* 6943
- development, proteins, content 2894
- morphology 4589

Carrot root

- carbohydrates, content 8814
- carotene, content, environmental factors 5375
- cell, structure, tissue culture 6945
- chlorophyll, biosynthesis 259
- colour, genetics 2138
- composition
 - environmental factors 5375
 - seed
 - production 692
 - sowing, date 692
 - soil, types 7820
- flavour 7821
- maturity, carotene, content 8814
- nitrogenous compounds, determination 7821
- nutrient absorption, tissue culture 6110-6112
- proteins, content 4941
- shape
 - measurement techniques 2142
 - phosphorus nutrition 6941
 - soil type 6941
 - statistical studies 690
- size
 - measurement techniques 2142
 - statistical studies 690
- sugars, determination 7821

Carrot seed

- germination 691
 - pelleted seed 3623
 - temperature 2093-2094, 6940
- production
 - growth substances 6947
 - harvesting, time of 6113
 - pollination, bees 5899
 - seed, sowing, date 692
 - seed sowing dates, Bulgaria 7814
 - quality, growth substances 6947
 - size 7813
 - growth substances 6947
 - harvesting, time of 6113
- sowing
 - dates 7813
 - Chile 258
 - root, composition 5375
 - seed production, Bulgaria 7814
 - USSR 1304
 - furrow-bed system 7815
 - mechanical, equipment 6939
 - spacing 2893, 7813, 7815
- treatment
 - acetone 691
 - capsicum fruit extract 2093-2094
 - copper 6108
 - fungicides 693, 3622
 - gamma rays 691
 - light, ultra violet 691
 - pelleted 3623
 - sterilization, disease control 693
 - viability, harvesting, time of 6113

Carrot soil

- salinity, plant tolerance 8812
- temperature, mulching 2895
- types
 - plant composition 7818
 - root composition 5375, 7820, 8814
 - root shape 6941
 - storage quality 7820
- Carrot stem, anatomy 4586
- Carrot varieties 4371
 - annual report, UK 5149
 - Chile 258
 - comparative trials, New Zealand 7811
 - disease resistance, *Stemphylium radicinum* 4588
 - male sterile 7812
 - Netherlands 8808
 - Paris Market, seed sources, variation 5372
 - under plastic 8808
 - report, Sri Lanka 2733
 - stem, anatomy 4586
 - USSR 1942

Carya spp., disorders, shuck disease 520**Caryedon serratus**, Colombia, tamarind

pests 5666

Caryophyllaceae

- medicinal properties, haemolytic activity 3967
- saponins 3967

Cashew

- annual report, Nigeria 4035
- growth studies, annual report, Burundi 4031
- production, review 9145

Cashew flower, morphology 7184**Cashew fruit**

- ascorbic acid 4850
- composition 4850
- tannins 4850

Cashew growth substances

- air-layering
 - treatment
 - IBA 6396
 - NAA 6396

Cashew propagation

- air-layering, treatment, growth substances 6396
- budding, time of 9146
- grafting, veneer 9146

Cassava, growing, as an intercrop, rubber 8178**Cassia angustifolia**

- glycosides 6290
- tissue culture, callus, quinones 9027

C. fistula

- anthocyanins 4717
- galactomannan 3070

C. occidentalis

- glycosides 9029
- quinones 9028-9029
- sterols 9028-9029

C. spp.

- bibliography 8974
- glycosides 3071
- nutrition, NPK 9026
- quinones 3071

Castanea mollissima, annual report, USA

25

Casuarina spp., as shade plants, coffee

4858

Catechins

- content
 - leaf
 - seasonal variations, *Pyrus* spp. 6646
 - varietal differences, tea 7271
 - shoot, seasonal variations, *Pyrus* spp. 6646

Catha edulis, essential oil, content 3072**Catharanthus lanceus**, alkaloids 6291**C. longifolius**, alkaloids 9030**C. roseus**

- alkaloids, production, tissue culture 7102
- diseases, little leaf, control, antibiotics 7767
- flower
 - anatomy 3968
 - nectary, structure 8009
- flowering, *Ocimum sanctum* leaf extract 8011
- fruit, anatomy 3968
- glycosides 4760
- plant, composition 9031

Catharanthus roseus *contd.*

seed

- anatomy 3968
- treatment
 - Ocimum sanctum* leaf extract 8011
 - X-rays
 - flowering 8010
 - pollen sterility 8010
 - seed number per fruit 8010
- seedling, treatment, *Ocimum sanctum* leaf extract 8011
- tissue culture
 - alkaloids, production 7102
 - tissues, media 7102
- Catharanthus** spp., alkaloids, content 770
- Catharanthus** spp.
 - alkaloids, content 771, 7103
 - leaf, anatomy 2335
 - root, anatomy 2335
 - stem, anatomy 2335

Cation exchange capacity

determination, coffee 398

leaf, areca 3176

root

- areca 3176
- Chlorophytum* spp. 4144
- Fragaria* spp. 4144
- Spinacia* spp. 4144
- squash 4144

Catopsis spp., photosynthesis 305**Cattleya** spp.

diseases

- cymbidium mosaic 8937
- flower necrosis 8937
- taxonomy, chemotaxonomy 8934
- tissue culture, meristem, annual report, Italy 6960

Cauliflower and broccoli

amino acids, metabolism 5936

annual report

- Austria 114
- Belgium 1131
- Denmark 3298
- German Federal Republic 8579
- Irish Republic 1939
- Italy 6771
- Netherlands 1132
- New Zealand 5152
- UK 598, 1934, 1936-1937, 3610, 3613-3614, 4365-4366, 8584
- USA 1130

breeding and selection

annual report, USA 3616, 7601

autumn harvesting 6791

carbohydrates

content

- flower bud, initiation 6800
- growth substances 7660

cold treatment, seedling 7659

curd

- development, growth substances 3667
- formation, growth substances 7661
- maturity 3658
- quality, seedling storage 7638
- size 3658

drying 22

enzyme activity, diseased plants, *Pythium* spp. 8791

flowering, growth substances 7661

growing

- media, compared 7605
- peat 7605
- under plastic 7647
- for production throughout the year 7638
- tunnels, plastic 7647

growth studies 6793

harvesting

- annual report, UK 2743
- mechanical, equipment 5937-5938
- once-over 5186
- time of 3658
- plant maturity criteria 4433
- seedling storage 7638

herbicides

maturity 1164

plant

- size, dazomet 7649
- thinning 7648
- residues, application, methods, pyrazon, dalapon, RH 315, DCPA, nitratin, trifluralin 1949
- tolerance, Ramrod, Semeron 3662

Cauliflower and broccoli contd.

- insecticides
- residues
 - determination
 - chlorpyrifos 4142
 - monocrotophos 7302
- endosulfan 2124
- soil
 - aldrin 4431
 - DDE 4431
 - DDT 4431
 - dieldrin 4431
 - lindane 4431
- irradiation, ionizing, injury 604
- irrigation 613
- juvility
 - leaf removal 7644
 - light 7644
 - temperature 7644
- light, juvenility 7644
- nitrogen, content, growth substances 7660
- nutrient absorption 6794
- nutrients, content 5890
- organic acids 6783
- photosynthesis, gas exchange ratio 2915
- planting
 - plant, size 3659
 - spacing 3658
 - disorder incidence 3657
- pollen, size, viability 2763
- respiration, plant, temperature 2744
- seedling
 - emergence, soil, compaction 4409
 - storage, plastic bags 7638
- soilless culture 4379
- storage 229
 - cold, ascorbic acid, content 3670
 - temperature, respiration 2744
- temperature
 - flower bud, initiation 6800
 - growth substances, endogenous 3667
 - juvenility 7644
- tissue culture 121
- weed control 1162, 1164, 3662, 6778, 7648-7649, 7652
 - annual report, German Federal Republic 7599
 - review 5925
- Cauliflower and broccoli diseases**
 - Alternaria brassicicola* 1170
 - cabbage yellows, incidence 614
 - mosaic, vectors, aphids 2759
 - Mycosphaerella brassicicola* 1170
 - necrotic yellows virus 1984
 - Peronospora brassicae*, varietal resistance 3654
 - Plasmodiophora brassicae*, varietal resistance 5920
 - Pythium* spp.
 - control 6920
 - host enzyme activity 8791
 - P. ultimum* 1171
 - turnip mosaic virus 1168
 - Xanthomonas campestris* 3664
- Cauliflower and broccoli disorders, hollow stem, incidence 3657**
- Cauliflower and broccoli flower**
 - bud initiation
 - carbohydrates 6800
 - growth substances
 - GA 6800
 - SADH 6800
 - temperature 6800
- Cauliflower and broccoli growth substances**
 - curd, formation, morphactins 7661
 - endogenous
 - apices
 - curd development 3667
 - temperature 3667
 - flower bud
 - initiation
 - aminozide 6800
 - GA 6800
 - flowering, morphactins 7661
 - plant
 - composition, GA 7660
 - weight, GA 7660
 - residues, plant, chlormequat 5198
- Cauliflower and broccoli leaf, removal, juvenility 7644**
- Cauliflower and broccoli nutrition**
 - boron 1983

Cauliflower and broccoli nutrition contd.

- boron contd.
 - deficiency, symptoms 1983
- calcium, requirements 4381
- copper 1983
 - deficiency, symptoms 1983
- iron 1983
 - deficiency, symptoms 1983
- magnesium, requirements 4381
- major elements, plant analysis 4381
- manganese 1983
 - deficiency, symptoms 1983
- minor elements
 - availability, nitrogen nutrition 8589
 - plant analysis 4381
 - sources 8589
 - toxicity, nitrogen nutrition 8589
- molybdenum 1983
 - deficiency, symptoms 1983
- nitrogen
 - curd
 - maturity 3658
 - size 3658
 - disorder incidence 3657
 - requirements 4381
 - sources
 - compared 144
 - minor elements 8589
 - minor elements toxicity 8589
- NPK 613
 - phosphorus
 - availability 120
 - requirements 4381
 - potassium, requirements 4381
 - sulphur, requirements 4381
 - zinc 1983
 - deficiency, symptoms 1983
- Cauliflower and broccoli pests**
 - aphids, virus vectors, mosaic 2759
 - Hylemya brassicae* 1173
 - chemosterilization 8625
 - traps, bait 8625
 - H. spp.* 1162
 - annual report
 - Canada 1944, 5883
 - UK 5154
 - Meloidogyne hapla* 2761
 - Myzus persicae*, virus, vectors 1168
 - Trichoplusia ni* 5929
- Cauliflower and broccoli plant**
 - composition, nitrogen 144
 - size
 - herbicides 7649
 - planting 3659
 - weight, growth substances 7660
- Cauliflower and broccoli root**
 - growth 1147
 - injury 6796
- Cauliflower and broccoli seed**
 - annual report, Belgium 4363
 - germination
 - pelleted seed 3623
 - soil, moisture 4409
 - production, disease control 1170
 - sowing
 - dates
 - autumn production 3669
 - Bulgaria 6793
 - summer production 3669
 - direct v. transplanting 1162
 - mechanical, equipment 1162
 - peat 7606
 - programme, continuous production 1163
 - spacing 5186, 7648
 - treatment
 - pelleted 3623
 - vernalisation 7644
- Cauliflower and broccoli soil**
 - compaction 4409
 - moisture 4409
 - temperature, disease incidence 614
- Cauliflower and broccoli varieties 1161, 4371**
 - annual report
 - Sarawak 3609
 - UK 5149
 - USA 4367
 - autumn harvesting 3669, 7643
 - comparative trials 3615
 - annual report, UK 5884
 - French West Indies 5918

Cauliflower and broccoli varieties contd.

- disease resistance, *Peronospora brassicae* 3654
- processing
 - annual report, German Federal Republic 7600
 - freezing 1177
 - for production throughout the year 7638
 - report, Sri Lanka 2733
 - summer harvesting 3669
 - Sweden 115
 - USA 8614
 - winter hardiness 7638
- Ceanothus nutrition, nitrogen, container-growth plants 267**
- Ceanothus propagation, cuttings, media 8845**
- Cecidomyia texana, Cyamopsis tetragonoloba pests 5269**
- Cecidophyopsis ribis**
 - black currant pests 4309
 - control
 - black currant pests 7496
 - fungicides, benomyl, black currant pests 4309
- Cedar propagation**
 - grafting
 - bench grafting 4687
 - side cleft 4687
- Cedar rootstocks 4687**
- Cedrus atlantica, essential oil, composition, determination 8990**
- Celeriac**
 - annual report, Belgium 1131
 - growing
 - media, compared 7605
 - peat 7605
 - hybrids, root storage quality 2902
 - irrigation, hollow tubers 6118
 - planting, spacing, hollow tubers 6118
 - proteins, content, root, storage quality 2902
 - storage, root, quality, hybrids 2902
- Celeriac diseases, Sclerotinia spp., control, annual report, German Federal Republic 7600**
- Celeriac disorders, hollow tubers, water relations 6118**
- Celeriac root, composition, storage quality 2902**
- Celeriac varieties**
 - annual report
 - Belgium 4363
 - Irish Republic 1939
 - comparative trials 3823
- Celeriac x parsley, hybrids 2902**
- Celery**
 - annual report
 - Belgium 1131
 - Cyprus 3604
 - UK 601, 1934, 1937, 3613, 5149, 6774, 6774, 8584
 - USA 4367, 7601, 8585
 - bibliography 8974
 - breeding and selection, annual report, USA 3616
 - cadmium, determination 4389
 - carbon dioxide injury 6782
 - enzyme activity
 - leaf
 - coloured light, disease incidence 8816
 - light intensity, disease incidence 8816
 - enzymes, diseased plants, light 8816
 - essential oil, fungicidal properties 6256
 - fungicides
 - residues
 - determination
 - benomyl 7609
 - thiophanate 7610
 - fentin acetate 2900
 - growing
 - early harvesting 3822
 - under plastic 4594
 - annual report, UK 6773
 - tunnels 1261
 - plastic, annual report, UK 4366
 - humidity, relative 8815
 - irrigation
 - flood
 - disease control 2144
 - nematode control 2144

Celery *contd.*

- lead, determination 4389
- light
 - coloured, disease incidence, enzyme activity 8816
 - intensity
 - disease incidence, enzyme activity 8816
 - photosynthesis 2901
- nematicides
 - pest population increase
 - Basamid 8811
 - Di-Trapex 8811
 - nitrite, toxicity 5893
 - photosynthesis, light, intensity 2901
 - planting
 - spacing 8815
 - annual report, Netherlands 1135
 - potting composts, annual report, New Zealand 5152
 - respiration
 - diurnal variations 2901
 - plant, heat production, storage 1148
 - temperature 2901
 - soiless culture 5487
 - storage
 - dips
 - disease control
 - Botrytis cinerea*, thiabendazole 6948
 - Cercospora apii*, thiabendazole 6948
 - Sclerotinia sclerotiorum*, thiabendazole 6948
 - Septoria apii*, thiabendazole 6948
 - disease incidence, *Centrospora acerina* 2145
 - respiration, heat production 1148
 - review 7612
 - temperature 8815
 - respiration 2901
 - weed control 5377, 6777, 8977
- Celery diseases**
 - Botrytis cinerea*
 - post-harvest dips 6948
 - post-harvest sprays 6948
 - Centrospora acerina* 6116
 - plant storage 2145
 - Cercospora apii*
 - post-harvest dips 6948
 - post-harvest sprays 6948
 - Fusarium* spp. 2144
 - mosaic 4595
 - Pythium* spp. 2144
 - Rhizoctonia* spp. 2144
 - Sclerotinia sclerotiorum*
 - post-harvest dips 6948
 - post-harvest sprays 6948
 - Septoria apii*
 - post-harvest dips 6948
 - post-harvest sprays 6948
 - S. apii-graveolentis* 2143
 - S. apicola* 2900
 - control 7822
 - pathogenicity 8816
 - virus, incidence, German Federal Republic 6781
- Celery flower**, bud initiation 6117
- Celery nutrition**
 - minor elements
 - availability, nitrogen nutrition 8589
 - sources 8589
 - toxicity, nitrogen nutrition 8589
 - nitrogen
 - sources
 - minor elements 8589
 - minor elements toxicity 8589
- Celery pests**
 - nematodes 2144
 - Paratylenchus* spp., soil treatment 8811
 - Psila rosae*, annual report, German Federal Republic 8579
- Celery seed**
 - sorting, air flow 4373
 - sowing
 - dates 5377
 - early harvesting 3822
 - depth 5377
 - direct 5377
 - peat 7606
 - treatment, growth substances, N⁶-benzyladenine 1309

Celery soil

- erosion, direct sown seed 5377
- moisture, 696
- Celery varieties**
 - annual report, Sarawak 3609
 - comparative trials, Netherlands 8815
 - greenhouse, plastic 4594
- Cell**
 - biology 1673
 - division
 - stimulation, tissue culture, turgor pressure, radish 1181
 - xylem formation, coleus 3901
 - enlargement
 - stimulation
 - fusicoccin, tissue culture, pea 8727-8729
 - growth substances, tissue culture, pea 8727-8729
 - tissue culture, turgor pressure, radish 1181
 - water permeability
 - growth substances
 - decenylsuccinic acid
 - onion 5313
 - Rhoeo* spp. 5313
- Cell sap**, concentration, nutrient solution, concentration, grapevine 6749
- Cell wall**
 - biochemistry 1673
 - composition
 - calcium, pea 7735
 - ethylene, pea 7735
 - fruit, apple 6603
 - growth substances
 - chicory 7623
 - pea 7735
 - leaf, tea 6464
 - structure, bean (*Vicia*) 203
- Celosia**
 - light, pigments, biosynthesis 6994
 - ozone, injury 1322
 - pigments
 - biosynthesis
 - inhibition 6994
 - light 6994
 - sulphur dioxide, injury 1322
 - Celosia argentea*, growing 7823
 - Celosia* flower, size, potassium nutrition 6133
 - Celosia* growth substances, retardants, review 7846
 - Celosia* nutrition
 - calcium, salinity damage 727
 - potassium, flower, size 6133
 - Celosia* seed
 - germination, salinity, damage, calcium nutrition 727
 - sowing, direct, in pots, pelleted 2165
 - treatment, pelleted 2165
 - Celosia* soil, salinity, damage, calcium nutrition 727
 - Cemistoma scitella*, apple pests 5738
 - Centaurea* spp., embryology 279
 - Centrospora acerina*
 - carrot diseases 6116
 - celery diseases 6116
 - parsnip diseases 6116
 - plant storage, celery diseases 2145
 - Cephaluros virescens*, litchi diseases 4818
 - Cephalocereus* spp., edible fruits 822
 - Cephaloleia* spp., oil palm pests 5637
 - Cephalophora aromatica*, essential oil, content 7983
 - Cephalosporium aphidicola*, fungal parasite, aphids, cucumber and gherkin 5956
 - C. diospyri*, incidence, hurricane damage, persimmon diseases 4827
 - C. sacchari*, water relations, sugar cane diseases 7244
 - Cephalotaxus* spp.
 - alkaloids 4761
 - propagation, cuttings, annual report, Netherlands 4604
 - Cerastium* spp.
 - ground cover plants 710
 - weed control 710
 - Ceratitis capitata*
 - aerial spraying, coffee pests 5623
 - apricot pests 63
 - coffee pests 397
 - parasites 5654
 - peach pests 8459

***Ceratitis capitata* contd.**

- poisoned bait, orange pests 7165
- C. spp.**, protein bait mixtures, orange pests 816
- Ceratocystis adiposa*, sugar cane diseases 4097
- C. fimbriata**
 - apricot diseases 63
 - control, rubber diseases 6384, 9212-9213
 - resistance
 - breeding and selection, cacao diseases 8131
 - carrot diseases 2141
 - coffee diseases 391
 - phenolic compounds, content, cacao diseases 9140
 - rubber diseases 4078-4079
 - varietal resistance
 - cacao diseases 1548
 - annual report, Venezuela 6391
 - coffee diseases 4055
- C. paradoxa**
 - resistance, breeding and selection, sugar cane diseases, annual report, USA 9221
 - sett treatment, sugar cane diseases 8228
 - soil moisture, sugar cane diseases 8227
 - sugar cane diseases 6431, 7240
 - annual report
 - Australia 9219
 - USA 9221
 - temperature, sugar cane diseases 8227
- C. stenoceras*, *Erica* spp., diseases, annual report, German Federal Republic 8837
- Ceratonina siliqua*, trunk, stress distribution 8939
- Ceratophyllum* spp., nitrite, toxicity 5893
- Cercospora angolensis*, citrus diseases 4000
- C. apii**
 - forecasting, celery diseases, annual report, USA 4367
 - post-harvest dips, celery diseases 6948
 - post-harvest sprays, celery diseases 6948
- Cercospora burserae*, *Bursera* spp., diseases 336, 8993
- Cercospora coffeicola*
 - coffee diseases 1574, 1576
 - nitrogen nutrition, coffee diseases 9167
- C. fusimaculans*, *Stenotaphrum secundatum*, diseases 7023
- Cercospora koepkei*, sugar cane diseases 1635, 6444
- C. longipes**, East Africa, survey, sugar cane diseases 8220
- C. musae**
 - banana diseases 1542
 - forecasting, banana diseases 6386
- C. purpurea**, avocado diseases, annual report, USA 2375
- C. spp.**
 - capsicum diseases, annual report, USA 4367
 - control
 - bean (*Phaseolus*) diseases 8690
 - grapevine diseases 8559
 - Ficus elastica*, diseases 5452
 - jasmine diseases 336
 - Ligustrum* spp., diseases 6240
 - oil palm diseases, annual report, Nigeria 9181
 - rose diseases, annual report, USA 8834
 - tea diseases 6459
- C. viticola**, pruning and training, grapevine diseases 569
- C. vitis**, grapevine diseases 5859
- Cercospora persicae*, peach diseases, annual report, USA 4945
- Cereus grandiflorus*, flower, opening-closing, rhythms 6201
- Ceratomyxa ruficornis*, vectors, rugose mosaic, bean (*Phaseolus*) pests 6845
- Ceuthorrhynchus assimilis*, brassicas, pests, annual report, German Federal Republic 8579
- Chaenomeles** spp.
 - seed
 - germination, seed, size 3001
 - size, seedling growth 3001
 - seedling, growth, seed, size 3001
- Chamaecyparis** spp.
 - annual report, Netherlands 6962

Chamaecyparis spp. contd.

- diseases
 - Phytophthora cinnamomi*, annual report, Netherlands 6961
- P. spp.*, varietal resistance 1387
- dormancy, phosphorus, absorption 3909
- growing
 - in containers, media 4689
- peat, nutrition, nitrogen 8941
- nutrition
 - nitrogen
 - container grown 267
 - container-grown plants 267
- phosphorus, absorption, dormancy 3909
- propagation
 - cuttings 6213
 - media 8845
 - annual report, Netherlands 1314
 - mist 5462
 - under plastic 5462
 - rooting capacity, growth substances, endogenous 3910
 - treatment, growth substances 3910, 5462

Chamaedorea spp.

- acaricides, injury 7024
- pests, mites, control 7024

Chamomile

- essential oil
 - composition 3050
 - light, coloured 3081
- content 2352
 - nitrogen nutrition 3054
- determination 6285
- medicinal properties 4770
- flowering
 - date
 - nitrogen nutrition 3972
 - phosphorus nutrition 3972
 - growth substances 3054
 - harvesting, mechanical, planting, spacing 8030
 - planting, spacing, harvesting, mechanical 8030
 - weed control 2356

Chamomile flower, drying quality, growth substances 3083**Chamomile growth substances**

- flower, drying quality, MH 3083
- flowering
 - GA 3054
 - IAA 3054
 - NAA 3054

Chamomile nutrition

- calcium, essential oil, content 3054
- nitrogen 3972
 - essential oil, content 3054
- phosphorus 3972
- potassium 3972

Chamomile seed, sowing, spacing 3082**Chamomile varieties**

- essential oil, content 2352
- Hungary 1679

Charcoal, media constituent, physical properties 7291**Cheimatobia brumata**

- apple pests, annual report, German Federal Republic 6506
- apricot pests 63

Cheledonium majus, alkaloids, content 2343**Chelonius starki, biological control of,**

- Aegeria myopaeformis* 3409

Chenopodium spp.

- as weeds
 - artichoke, globe 3633
 - asparagus 2827
- weeds, bean (*Phaseolus*) 2017
- as weeds, tomato 6069

Cherimoya, breeding and selection, annual report, Tunisia 3981**Cherimoya fruit**

- anatomy 2436
- morphology 2436

Cherry

- annual report
 - Belgium 2517, 6503
 - Canada 2515, 8314
 - German Federal Republic 6504, 6506, 7309-7310
 - Netherlands 23
 - UK 8318
 - USA 24, 3348, 8319
- breeding and selection 4231, 8430

Cherry contd.**breeding and selection contd.**

- annual report
 - Sweden 6508
 - USA 4945
- disease resistance, *Pseudomonas* spp., annual report, UK 3346
- frost resistance 8430
- Prunus* spp. 64
 - cold, protection, forest belts 4186
 - cover crops, grass-lucerne, disorder incidence, chlorosis 8435
- defoliation
 - chemical 5716, 6510-6511
 - growth substances 6511
- dormancy
 - breaking, temperature 907
 - winter hardiness, water relations 6521
 - drought 8285
 - economics, Hungary 6614
 - enzyme activity, fruit abscission layer 7431
- frost
 - damaged plants, pruning and training 2622
- injury
 - bud development 1709
 - flower bud 4235
 - recovery 5699
 - root 2554, 2622, 5699
 - shoot 6617
 - ice formation 5019
- protection, flowering date, growth substances 8432
- resistance
 - ascorbic acid, content 2627
 - rootstock-scion relationships 2622
 - varieties, USSR 8430
- fungicides
 - fruit, ripening, benomyl 2632
- injury
 - bordeaux 6612
 - triflorine 8475
 - residues, determination, binapacryl 7324
- grading, EEC standards 1810
- growing 4231
 - Crimea 2617
 - Italy 998
 - N. America 996
 - North America 997
 - Switzerland 995
- growth-yield relationships 8441
- harvesting 996, 3450, 4231
- fruit, loosening, growth substances 7433
- mechanical 1005
 - equipment 457
- fruit
 - injury, shakers 2633
 - loosening 500
 - ascorbic acid 8445
 - growth substances 501, 8445
 - ethephon 2633
- Munckhof hand-operated vibrator 4241
- shakers, fruit injury 2633
- time of, processing 3449
- heat treatment, fungus control, fruit 6619
- herbicides
 - injury, terbacil 3510
 - tolerance 3510
- high density planting, Switzerland, statistics 8324
- hybrids 3442
 - disease resistance, *Sclerotinia* spp. 6615
- insecticides
 - injury, dichlorvos 2625
 - residues
 - determination
 - bromophos 4238
 - iodofenphos 4238
 - plant, determination 3330
- light
 - fruit
 - composition 5761
 - size 5761
- mulching, sawdust 4191
- mutants, spur types 1806
- orchard renewal, frameworking 4157
- packing 3450

Cherry contd.**packing contd.**

- cooling 70, 3450
- damage 7307
- EEC standards 1810
- planting
 - high density 995
 - Switzerland 904
 - survey, Switzerland 904
- pollen, germination, morphology 8330
- pollination 3448
 - pollinating varieties 2628-2629
- processing 996
 - brining 3449
 - harvesting, time of 3449
- pruning and training 5762
 - review 7428
 - wound healing 8433
- regeneration, pruning 5762
- ringing, fruit, drop 8444
- stomata, water absorption, fruit, cracking 3445
- storage
 - controlled atmosphere
 - hypobaric 7326
 - hypobaric system 1705
 - fruit composition 7326
 - temperature 5821
- symposium 4232
- temperature
 - bud, development 1709
 - dormancy, breaking 907
- tissue culture
 - cambium, growth inhibition, phenolic compounds 8442
 - embryo
 - media 7432
 - propagation 8431
 - temperature 7427
- transpiration
 - anti-transpirants
 - fruit
 - composition 2630
 - size 2630
- transport 3450
 - damage 7307
 - in water 1718
 - water relations, dormancy 6521
 - weed control 2562, 7316
 - as windbreaks 4294
 - winter hardiness 5020
 - dormancy 6521
 - leaf removal 6521
 - flower bud initiation 8443
 - nitrogen nutrition 6617
 - wound healing 8433
 - yield, estimation, statistical methods 4233
 - yield-growth relationships 8441

Cherry diseases

- Alternaria* spp. 5022
- Amasya disease virus 1808
- Blumeriella jaapii* 7429, 8439
- control 8305
- Botrytis* spp. 5022
- chlorotic-necrotic ringspot, grafting, union, development 8437
- chlorotic ringspot
 - grafting, union, development 8437
 - yield reduction 8436
- chlorotic ringspot virus
 - control, heat treatment 1809
 - incidence, rootstocks 999
- Clasterosporium carpophilum*
 - aerial spraying 8438
 - varietal resistance 8438
- Coccomyces* spp., varietal resistance 4237
- Cylindrosporium padi* 498
- enation disease virus 497
- green ring mottle, yield reduction 8436
- leaf roll, yield reduction 8436
- Monilinia* spp. 5022
- necrotic ringspot 4948
 - detection 4236
 - grafting, union, development 8437
 - yield reduction 8436
- necrotic ringspot virus
 - control, heat treatment 1809
 - incidence, rootstocks 999
- Pfeffinger disease 4948
- Phomopsis mali* 1755
- P. spp.*, infection process 7449

Cherry diseases contd.

- prune dwarf, detection 4236
- Prunus* ringspot, pollen-borne 7475
- Prunus* stem pitting virus, detection, root chip inoculation 512
- Pseudomonas* spp., rootstock resistance 5018
- raspberry ringspot virus, control, heat treatment 1809
- Rhizopus* spp. 5022
- Sclerotinia fructicola* 8475
- heat treatment 6619
- post-harvest dips 6619, 7481
- S. fructigena*, aerial spraying 8438
- Sclerotinia laxa* 2613-2614, 2624
- control 6612
- varietal resistance 6618
- S. spp.*, varietal resistance 6615
- Stecklenberger disease 4948
- stem pitting virus 1823
- Poland 67
- strawberry ringspot, yield reduction 8436
- virus
 - control 7320
 - tested plants
 - annual report, German Federal Republic 6505
 - EMLA scheme 2528
 - Special Stock Certification Scheme 7320
 - German Democratic Republic 7321

Cherry disorders

- apoplexy, fungus relationships, *Phytophthora* spp. 454
- chlorosis 8435
- iron deficiency 496
- leaf anatomy 8429

Cherry flower

- biology 3448
- bud
 - ascorbic acid, content, frost, resistance 2627
 - proteins, distribution 2627
- bud initiation
 - time
 - plant nutrition 2530
 - rootstocks 2530
 - soil management 2530
 - winter hardiness 8443
- morphology, growth correlations 4164

Cherry fruit

- abscission layer
 - anatomy 501
 - composition 499
 - enzyme activity 7431
 - histochemistry 2631
 - histology 501
- ascorbic acid 3451
- bruising 5022
- colour, growth substances, ethephon 500
- composition
 - anti-transpirants 2630
 - calcium 69
 - light 5761
 - magnesium 69
 - storage, controlled atmosphere, hypobaric 7326
- coumarins, content 8446
- cracking 3443-3445
 - anti-transpirants 4239
 - cuticle, structure 2618
- development 69
 - growth substances, endogenous 6620
- drop 69
 - growth substances 8444
 - anatomy 68
 - leaf removal 8444
 - ringing 8444
- ethylene, production, growth substances, ethephon 2631
- firmness
 - irradiation, ionizing, post-harvest 7434
 - post-harvest dips 7434
 - storage, temperature 7434
 - irradiation, ionizing, post-harvest 7434
 - loosening
 - ascorbic acid 8445
 - growth substances 7433, 8445
 - ethephon 500-501, 2633, 5801
 - nitrogen, content, dropped fruit 8444
- ripening 499
 - fungicide treatment, benomyl 2632

Cherry fruit contd.

- ripening contd.
 - growth substances
 - aminozide 2632
 - benzyladenine 1004
 - GA 1004
 - kinetin 1004
 - oil treatment 2632
 - time, flowering date 3446
- set 3448
- size
 - anti-transpirants 2630
 - light 5761
- stone
 - shape 2620
 - size 2620
- sugars
 - content
 - growth substances 1002
 - benzyladenine 1004
 - GA 1004
 - kinetin 1004
 - wax, structure 2618

Cherry growth substances

- endogenous
 - fruit 5761
 - seed 6620
- ethylene, production, ethephon 2631
- flowering, date, ethephon 8432
- fruit
 - abscission, ethephon 2631
 - colour, ethephon 500
 - drop
 - anatomy, GA 68
 - GA 8444
 - kinetin 8444
 - loosening
 - cycloheximide 8445
 - 2,4-D 8445
 - ethephon 500-501, 2633, 5801, 7433, 8445
 - GA 8445
 - morphactins 8445
- ripening
 - aminozide 2632
 - benzyladenine 1004
 - GA 1004
 - kinetin 1004
- sugars
 - content
 - 2,4-D 1002
 - GA 1002
 - kinetin 1002
 - injury, ethephon 7433
 - leaf, removal, ethephon 6511
 - metabolism, IAA 8442
 - responses
 - aminozide 3360
 - chlormequat 8329

Cherry leaf

- anatomy, chlorosis 8429
- cell sap, concentration, seasonal variations 916
- potassium, content, iron nutrition 496
- removal
 - chemical 6510-6511
 - fruit drop 8444

Cherry nutrition

- copper 496
- general, leaf analysis, symposium 2489
- iron 496
 - chlorosis 8429
- nitrogen, winter hardiness 6617

Cherry pests

- Archips* spp. 2580
- A. xylosteana*, parasites, *Trichogramma* spp. 2580
- birds
 - protection against 7430
 - economics 5021
- mites, biological control 29
- Myzus cerasi*, aerial spraying 8438
- Quadraspidiotus perniciosus*, control 7322
- Rhagoletis cerasi* 1000
- aerial spraying 8438
- control 5763
- baits 1000
- R. fausta* 1001
- R. indifferens* 1001
- Scolytus mali* 8440
- Cherry propagation**
 - air-layering 1015

Cherry propagation contd.

- budding 5762
- cuttings 1807
 - root, treatment, growth substances, IBA 8323
- shoot
 - age 4178
 - part 4178
- source plants, treatment, growth substances 1809
- treatment
 - growth substances 1809, 4178
 - IAA 4513
 - NAA 4513
- embryo, tissue culture 8431
- grafting 5762
 - union, development, virus diseases 999, 8437
- nursery stock, defoliation 5716
- Cherry rootstocks, F12/1** 495
- Cherry rootstocks**
 - comparative trials
 - cherry varieties 66
 - Mazzard 66
 - Prunus* spp. 4234
 - seedling 4234
 - disease resistance, *Pseudomonas* spp. 5018
 - propagation, cuttings 4234
 - Prunus fruticosa*
 - cold resistance 5018
 - propagation 5018
 - Prunus* spp. 495, 4234
 - virus incidence 999
 - scion relationships
 - flower bud, initiation 2530
 - frost resistance 2622
 - virus-tested plants, EMLA scheme 7320
- Cherry soil**
 - fumigation, soil sickness, chloropicrin 8381
 - salinity, varietal behaviour 8434
 - sickness, fumigation 8381
 - temperatures, frost injury 2554
- Cherry varieties** 2621
- Alma 5759
- annual report, USA 3349
- ascorbic acid, content, Yugoslavia 3451
- Barbara 5759
- Bianca 5759
- Canada 1724
- Compact Lambert 1724
- comparative studies, USSR 8430
- comparative trials 5016
 - annual report, Cyprus 3345
- Czechoslovakia 3438, 3441
- disease resistance
 - Clasterosporium carpophilum* 8438
 - Coccomyces* spp. 4237
 - Sclerotinia laxa* 6618
 - S. spp.* 6615
- disorder incidence, chlorosis 8435
- Drogana Zheltaya 2617
- evaluation 3440
- flowering, date 3446
- frost resistance 2623
- fruit
 - cracking 3444
 - flavour 2623
 - ripening, time 3446
 - ripening time 1003
- identification 2619
- Köröser Weichsel, pollination 2629
- Kosmichna 5017
- Lambert, spur types 1806
- Magda 5760
- Marasca 3447
- Merton Bigarreau 5759
- Merton Bounty 5759
- Merton Favourite 5759
- Merton Heart 5759
- Merton Premier 5759
- pollen compatibility 2628
- pollination, annual report, German Federal Republic 8315
- Rebekka 5759
- register, USA 3356
- Salmo 1724
- Sam 5759
- soil salinity 8434
- Stella 1724
- synonyms 3438
- Syrpriz 5017

Cherry varieties *contd.*

- Tunisia 4155
- USSR 2521, 2623, 3439
- Valeska 5759
- Van 5759
- virus-tested clones, EMLA scheme 2528, 7320

Chervil, weed control 6777

Chervil seed, annual report, Belgium 4363

Chestnut (*Aesculus*)

- light, intensity, photosynthesis 7325
- photosynthesis 7325

Chestnut (*Aesculus*) leaf, temperature, photosynthesis 7325

Chestnut (*Castanea*)

- annual report, USA 25
- fungicides, translocation, oxycarboxin, growth substances 5707
- growing
 - Italy 5023
 - Japan 5023
- insecticides 3318
- organic acids, content, seasonal variations 4163
- tissue culture, callus, grafting
 - compatibility studies 3567

Chestnut (*Castanea*) diseases

- Cryptodiaporthe castanea* 1006
- Diplodina castaneae* 1006
- Stereum rugosum* 1006
- Trametes hirsutus* 1006

Chestnut (*Castanea*) flower

- development 71
- initiation 71

Chestnut (*Castanea*) growth substances, fungicides, resistance, breeding and selection 8447

Chestnut (*Castanea*) nutrition, NPK, leaf analysis 2634

Chestnut (*Castanea*) pests, *Dryocosmus kuriphilus*, resistance, breeding and selection 8447

Chestnut (*Castanea*) varieties, pest resistance, *Dryocosmus kuriphilus* 8447

Chicory

- annual report
 - Belgium 1131, 4363, 5148, 5906, 8578
 - Netherlands 8581
 - UK 6774
- blanching 5176
- breeding and selection
 - annual report, Italy 6771
 - for forcing 5907
- cell wall, composition, growth substances 7623
- enzyme activity 2750
- enzymes, biosynthesis, tissue culture 7624
- forcing

- economics 3639
- irrigation, capillary 1151
- methods compared 3639
- soilless culture 5177

fungicides

- residues
 - determination
 - benomyl 7609
 - thiophanate 7610

- growing
 - review 132
 - South Africa, economics 5640
 - tunnels 5176
- harvesting
 - time of
 - planting, spacing, time 5886
 - sowing, dates 5886

- lead, determination, atomic absorption spectrophotometry 6784
- mulching, plastic 5176
- soilless culture, forcing 5177
- tissue culture
 - annual report, UK 1938
 - leaf, propagation 3638
 - root callus, bud formation 8602

- weed control
 - annual report, German Federal Republic 8579
 - review 5182

Chicory diseases

- Fusarium oxysporum* 7622
- Phoma exigua* 8601

Chicory growth substances, cell wall, composition, 2,4-D 7623

Chicory nutrition

- nitrogen 5176
- phosphorous 5176
- Chicory pests**, *Meloidogyne* spp. 1152
- Chicory propagation**, leaf, tissue culture 3638

Chicory root, composition, fructo-oligosaccharides 133

Chicory seed

- sowing
 - dates 5886
 - drills, annual report, Netherlands 1132
- Chicory varieties**, forcing 7621

Chilling requirements

- flowering, olive 9113
- tung, annual report, USA 2433

Chilo indicus, incidence, sugar cane pests 853

C. infuscatellus

- incidence, sugar cane pests 853
- parasites, sugar cane pests 1641

C. spp., Mexico, sugar cane pests 6440

Chilocorus bipustulatus, predator on, scale insects, citrus pests 1490

C. cacti, predator on, *Aonidiella aurantii*, citrus 9096

C. nigritus, predator on, *Aulacaspis tegalensis*, sugar cane 9256

Chilotranea auricilia, incidence, sugar cane pests 851, 4892

Chimeras

- colchicine induced, camellia 315
- graft, camellia 1385
- pigments, content, privet 8963

Chinese gooseberry

- fruit, ascorbic acid, content 1047
- growing
 - France 4301
 - South Africa 4300

- temperate regions 1047
- harvesting, time of, fruit ripening 4303
- insecticides, injury, oil 5080
- storage, fruit quality 4303

Chinese gooseberry fruit

- colour, storage 4303
- composition 102
- storage 4303

- firmness, storage 4303
- ripening, storage 4303

Chinese gooseberry growth substances, residues, SADH 480

Chinese gooseberry pests

- Hemiberlesia rapax* 5080
- Meloidogyne hapla* 4302

Chinese gooseberry varieties, register, USA 4156

Chionaspis citri, citrus pests, annual report, USA 8051

Chiranthodendron pentadactylon, flower, composition 781

Chive pests, *Agromyza* spp., control 8746

Chlorine

- absorption, growth substances, kinetin, bean (*Phaseolus*) 2027
- content
 - leaf
 - potassium nutrition, sources, chloride 3199
 - wind damage
 - citrus 1474
 - orange 1474
 - plant, air pollution, annual report, German Federal Republic 6481
- deficiency, sugar cane 8218
- determination, spectrophotometric method 6486
- leaf analysis
 - banana 9131
 - citrus 1484
- requirements, varietal differences, sugar cane 8218
- toxicity
 - photographic surveys, grapefruit, annual report, USA 790-791
 - plant tolerance
 - irrigation water, vegetables, ornamental plants, fruit trees and plants 5163
 - pea 3734
 - soil, peach 509
 - translocation, tomato 2126

Chlorophyll 1673 (*see also* Pigments)

Chlorophyll *contd.*

- biosynthesis
 - bean (*Phaseolus*) 185, 7708
 - bean (*Phaseolus*) seedling 186
 - carrot root 259
 - ethylene, cucumber and gherkin 2779
 - growth substances
 - CCC, lettuce 137
 - orchids 7029
 - inhibition, actinomycin D, bean (*Phaseolus*) 5983
- light
 - far red, bean (*Phaseolus*) 7715
 - red
 - bean (*Phaseolus*) 7715
 - pea 6865
 - mustard 3021
 - mustard seedling 186
 - phytochrome, bean (*Phaseolus*) 7715
 - potassium, lettuce 137
 - storage, tomato 8803
- content
 - chloroplast, growth substances, cucumber and gherkin 2005
 - cold treatment, sugar cane 8247
 - coloured light, orange 7149
 - diseased plants
 - proliferation, apple 7377
 - sugar cane 8247
 - yellow vein mosaic, okra 6887
 - fruiting relationships, apple 6573
 - growth substances
 - bean (*Phaseolus*) 2799
 - chlormequat, *Vinca* spp. 1442
 - gloxinia 6176
 - grapevine 1125
 - radish 7668
 - iron, nutrition, grapevine 3580
- iron nutrition
 - apple 6563
 - orange 8075
 - tomato 7789
 - Vinca* spp. 1442
- leaf
 - fluorine toxicity, coleus 8922
 - herbicides, tomato 6926
 - light, intensity, cucumber and gherkin 4459
 - light intensity, peach, pear 3491
 - osmotic pressure, bean (*Phaseolus*) 1217
 - position, grapevine 5864
 - soil salinity, tomato 6926
 - thickness, apple 4991
 - light, intensity, mandarin and tangerine 6352
 - measurement 4917
 - spectrophotometry 6487
 - mutants, cucumber and gherkin 8656
 - nitrogen nutrition
 - mandarin and tangerine 6352
 - Vinca* spp. 1442
 - ozone injury, bean (*Phaseolus*) 2788
 - phytochrome relationships 4937
 - plant development, *Sternbergia lutea* 6190
 - plant nutrition
 - capsicum 6892
 - citrus 9100
 - lemon 3112
 - strawberry 5815
 - tomato 254, 6077
 - rootstock effect, pear 1032
 - seasonal variations, apple 4991
 - seed, pea 3752
 - seed treatment, gamma rays, onion 8738
 - seedling
 - growth substances, lettuce 6789
 - pea 3752
 - seed treatment, raspberry 5807
 - soil moisture
 - mint 6269
 - Salvia* spp. 6269
 - soil pH, *Schizandra chinensis* 8968
 - temperature
 - mandarin and tangerine 6352
 - tomato 5990
 - tissue culture, *Ruta* spp. 9053
 - water relations, tomato 254
- degradation
 - fruit, ripening, apple 52
 - leaf, senescence, apple 7400

Chlorophyll contd.

- degradation *contd.*
- pests, *Eutetranychus buxi*, aspidistra 741
- virus diseases, vegetables 1259
- disease relationships, bean (*Phaseolus*) 174
- metabolism
- bean (*Phaseolus*) 7714
- enzyme activity, spinach 4396
- flower, chrysanthemum 273
- growth substances
- cucumber 151
- kale 151
- mustard 3021
- photoperiodism, apple 50
- tissue culture, *Ruta* spp. 9053

Chlorophytum spp.

- growth substances, endogenous, translocation 706
- root, cation exchange capacity 4144

Chloroplast

- activity
- fungicides, bean (*Vicia*) 8713
- leaf, size, capsicum 6044
- tissue culture
- bean (*Vicia*) 128
- spinach 128
- damage, frost, injury, light, cucumber and gherkin 2003
- development
- bean (*Phaseolus*) 5986, 7710
- growth substances
- endogenous, citrus 2399
- pumpkin 2780
- herbicides, radish 5202
- light, pea 6865
- Zantedeschia aethiopica* 8911
- enzyme activity, pea 8725
- enzymes, pea 2819, 3742
- metabolism, bean (*Phaseolus*) leaf 184
- number
- light
- apple 8337
- spinach 4394
- photosynthesis, brassicas 8628
- temperature, spinach 4394
- proteins
- biosynthesis, bean (*Vicia*) 2045
- content, zinc deficiency, tomato 4564
- determination, antirrhinum 5411
- saponins, content, pea 7743
- size
- light, apple 8337
- temperature, spinach 4394
- starch, content, temperature, sugar cane 4088
- sterols, content, bean (*Phaseolus*) 2034
- structure
- herbicides
- aminotriazole, sweet basil 1409
- radish 5202
- virus infection, sweet basil 1409
- tetraploid plants, spinach 125
- volume variations, measurement, pea 212

Choanephora cucurbitarum

- bean (*Phaseolus*) diseases 5249
- pumpkin diseases 4455

Chondrilla spp., as weeds, citrus 6338**Chorizococcus lounsburyi**, virus vectors, *Hippeastrum*-mosaic, amaryllis, annual report, Netherlands 6961**Chortophila spp.**, radish pests, annual report, German Federal Republic 7597**Chromosome numbers**

- atlas, vegetables 5158
- citrus 7123
- medicinal plants 1319
- ornamental plants 1318-1319

Chromosomes, structure, tulip 8901**Chrysalidocarpus lutescens**, seed, germination 2415**Chrysanthemum**

- acaricides
- injury, demeton, monocrotophos 6976
- pest resistance
- diazinon 6974
- ethion 6974
- malathion 6974
- naled 6974
- parathion ethyl 6974
- tolerance, methiocarb, annual report, German Federal Republic 8837
- Chrysanthemum contd.**
- air pollution, injury, peroxyacetyl nitrate 2925
- annual report
- Austria 265
- Belgium 5386
- Canada 8836
- Netherlands 704, 6126-6127
- UK 4605, 4622
- USA 1441, 6129, 8834
- breeding and selection
- annual report, Canada 2910
- pollen compatibility 8858
- bromine contents, soil, fumigation, methyl bromide 5394
- calcium, content, shoot, root temperature 8863
- carbohydrates, content, leaf, disorders 6972
- carbon dioxide
- supplementary 272
- planting, spacing 6143
- copper, content, shoot, root temperature 8863
- dwarfing
- growth substances 7861
- aminozide 2031
- butylammonium bromides 2031
- chlormequat 2031
- ethylene
- concentration, flooding 3837
- injury 6132
- flooding, ethylene, concentration 3837
- flowering
- date
- growth substances 1336, 8864
- nutrition 718, 718
- growth substances 2926, 2928
- light
- artificial 8841
- supplementary 8841
- photoperiodism 6148
- fungicides
- application, methods compared, systemic, annual report, German Federal Republic 6959
- injury, chlorothalonil 6973
- insect control, benomyl 6973
- mite control, benomyl 6973
- plant
- height
- Dexon 6146
- ethoxy trichloromethylthiadiazole 6146
- growing
- under cloth-shaded structures 8860
- conifer bark humus 7855
- under glass 7855
- artificial illumination 877
- for cut flowers 7862
- in greenhouses
- glass 8841
- plastic 8841
- transport, conveyor belt 6965
- media, coal ash 8857
- peat 7855
- nutrition 6145
- minor elements 4382
- under plastic, annual report, UK 4606
- as pot plants, production 5390
- in pots 5404
- irrigation, mats 8859
- for production throughout the year 2183, 5404
- Netherlands 7853
- straw bales 1142, 6143
- growth studies
- light duration 7859
- light intensity 7859
- heat treatment 1690
- herbicides
- injury, nitralin 6144
- responses 8852
- insecticides
- fungus control, *Mycosphaerella ligulicola*, azinphos methyl 6973
- injury
- demeton, monocrotophos 6976
- dichlorvos 4629
- nicotine 4629
- iron, content, shoot, root temperature 8863

Chrysanthemum contd.

- irrigation
- fertilizers, application 2185
- mats
- paper 8859
- plastic 8859
- needs, seasonal, root growth 2186
- light
- artificial 1334
- equipment 8841
- flowering 8841
- duration
- growth studies 7859
- respiration 7860
- intensity
- annual report, USA 1315
- growth 272
- growth studies 7859
- respiration 7860
- supplementary 5404
- equipment 8841
- flowering 8841
- flowering date 3842
- magnesium, content, shoot, root temperature 8863
- manganese, content, shoot, root temperature 8863
- nematicides, injury, varietal differences, Mocap 6977
- nitrogen, content, shoot, root temperature 8863
- phosphorus, content, shoot, root temperature 8863
- photoperiodism 5404
- flower, development 6148
- flower bud
- initiation 7858
- plant age 7857
- flowering 3296
- physiology, annual report, USA 3835
- planting, spacing 6143
- pollination, compatibility, genetics 8858
- potassium, content, shoot, root temperature 8863
- potting composts, peat-polystyrene mixtures 4624
- report, USA 6130
- respiration
- light duration 7860
- light intensity 7860
- sugars, content, leaf, disorders 6972
- sulphur dioxide, injury 6132
- temperature, growth 272
- tissue culture
- callus, media 2927
- meristem, annual report, Netherlands 6961
- shoot-tip 1331
- transport, vacuum cooling 2164
- water potential, plant, measurement 6147
- weed control 6144, 8852
- annual report, New Zealand 5391
- zinc, content, shoot, root temperature 8863
- Chrysanthemum diseases**
- Erwinia carotovora* 3915
- E. chrysanthemi* 4625
- flower-distortion virus 271
- Fusarium oxysporum*
- f. chrysanthemi*, varietal resistance 8862
- f. tracheiphilum*, varietal resistance 8862
- F. spp.*, varietal resistance 8862
- Mycosphaerella ligulicola*
- control 6973
- environmental factors 4626-4627
- forecasting 1333
- Oidium chrysanthemi* 6229
- Puccinia chrysanthemi*, varietal resistance 5405
- Puccinia horiana* 3319, 4628
- stunt virus 271
- tomato aspermy
- heat treatment 2190
- shoot-tip culture 2190
- vein mottle
- heat treatment 2190
- shoot-tip culture 2190
- Verticillium dahliae* 3325
- virus B
- heat treatment 2190

- Chrysanthemum diseases** *contd.*
 virus B *contd.*
 shoot-tip culture 2190
- Chrysanthemum disorders**
 excess photosynthate syndrome
 carbohydrates, content 6972
 varietal resistance 6972
 petal necrosis 8861
- Chrysanthemum flower**
 bud development, growth substances 2928
 bud initiation
 photoperiodism 7858
 plant age 7857
 colour, pigments, metabolism 273
 composition, pigments 273
 cut
 harvesting in bud 8866
 life, nutrition 718
 opening
 treatment 4631
 growth substances, Aadural-AK 719
 8-hydroxyquinoline citrate 8866
 pest control, post-harvest treatment 6976
 preservatives
 disorder incidence 6972
 vase life 4611
 production 7862
 development
 anthocyanin, content, seasonal variations 8865
 photoperiodism 6148
 sugars, content, seasonal variations 8865
 harvesting in bud 4631
 pigments, annual report, UK 3832
 quality, nutrition 718
- Chrysanthemum flowering**
 date, light 3842
 light, artificial, report, Australia 3831
- Chrysanthemum frutescens**, growing, as a pot plant 7854
- Chrysanthemum growth substances**
 absorption, leaf, aminozone 4630
 application, adjuvants, oil 6978
 branching
 BA 1335
 ethephon 1335
 morphactins 8864
 PBA 1335
 cuttings, rooting, source plant, treatment, BA 1335
 dwarfing
 aminozone 2031, 2926, 7861
 ancymidol 1336, 7861
 BA 1335
 butylammonium bromides 2031
 chlormequat 2031, 2926
 EL 558 7861
 MH 2926
 Phosfon 2926
 phosfon 7861
 endogenous
 flower 2191
 growth substances application 8864
 leaf 2191
 shoot 2191
 flower
 cut, opening, Aadural-AK 719
 number
 aminozone 2926
 chlormequat 2926
 GA 2926
 MH 2926
 size
 GA 2926
 MH 2926
 flower bud
 development
 BA 2928
 GA 2928
 IAA 2928
 flowering
 BA 2928
 date
 aminozone 2926
 ancymidol 1336
 chlormequat 2926
 GA 2926
 MH 2926
 morphactins 8864
- Chrysanthemum growth substances** *contd.*
 flowering *contd.*
 date *contd.*
 Phosfon 2926
 GA 2928
 flowering time, ethephon 1335
 interaction, applied, morphactins, and endogenous 8864
 plant
 composition
 aminozone 2031
 butylammonium bromides 2031
 chlormequat 2031
 retardants
 morphactins 8864
 Pydanon, annual report, German Federal Republic 7843
 review 7846
 translocation
 aminozone 4630
 heteroauxin 1320
- Chrysanthemum maximum**
 flower
 cut
 preservatives 6979
 vase life 6979
- Chrysanthemum nutrition**, fertilizers, application, irrigation 2185
- Chrysanthemum nutrition** 270
 boron, deficiency 8861
 calcium
 absorption, peat pH 6145
 peat, pH, nutrients absorption 6145
 fertilizers, slow-release 1332
 magnesium
 absorption, peat pH 6145
 deficiency 1325
 manganese, toxicity 1325
 minor elements
 annual report, Netherlands 6962
 availability, nitrogen nutrition 8589
 deficiencies 1325
 sources 8589
 toxicity, nitrogen nutrition 8589
 molybdenum, deficiency, growing in peat 4382
 nitrogen 1325, 2187
 absorption, peat pH 6145
 ammonium toxicity 2189
 flower
 cut, life 718
 quality 718
 flowering, date 718
 leaf analysis 7856
 sources
 minor elements 8589
 minor elements toxicity 8589
 water requirements 718
 NPK, plant analysis 2188
 phosphorus 2187
 absorption
 calcium deficiency, chrysanthemum 1332
 peat pH 6145
 calcium deficiency 1332
 leaf analysis 7856
 potassium 2187
 absorption, peat pH 6145
 flower
 cut, life 718
 quality 718
 flowering, date 718
 leaf analysis 7856
- Chrysanthemum pests**
Aphelenchoides ritzemabosi 3841
Liriomyza munda, control 6973
 mites, control 6973
Myzus persicae
 control 6973, 6975
 cut flowers 6976
 resistance 1697
 nematodes, control 6977
Tetranychus telarius
 acaricides, resistance 6974
 control 6973, 6975
 cut flowers 6976
 thrips, control 6973
- Chrysanthemum plant**
 composition
 growth substances
 aminozone 2031
 butylammonium bromides 2031
 chlormequat 2031
- Chrysanthemum propagation**
 cuttings
 light 3842
 media, annual report, Netherlands 1314
 treatment
 gamma rays 6970
 growth substances 6971
 ethephon 4623
 IBA 4623
 shoot-tip culture 2184
 virus-free plants 2190
- Chrysanthemum root**, growth, seasonal variations 2186
- Chrysanthemum soil**
 composts compared 1332
 fumigation, methyl bromide, plant composition, bromine 5394
 steaming
 frequency, ammonium toxicity 1325
 plant, height 6146
 temperature, shoot composition 8863
- Chrysanthemum varieties**
 AYR production 5404
 disease resistance
Fusarium spp. 8862
Puccinia chrysanthemi 5405
 disorder incidence, excess photosynthate syndrome 6972
 Fandango 5404
 greenhouse 7862
 Heyday 5404
 nematode injury, Mocap 6977
 Polaris 5404
 Pollyanne 5404
- Chrysomphalus aonidum**
 biological control
 avocado pests 3983
 citrus pests 1491
 citrus pests 4004
- C. dictyospermi**, parasites, *Aphytis melinus*, citrus pests 1492
- C. ficus**, orange pests 7147
- Chrysopa carnea**, predator on, *Panonychus ulmi*, apple 4213
- C. nigricornis**, predator on, *Panonychus ulmi*, apple 4213
- C. rufilabris**, predator on, *Panonychus ulmi*, apple 4213
- C. spp.**, predators on, *Macrosiphum pisi* 1232
- Chrysophyllum cainito**, fruit, aroma 7171
- Cichorium** spp., classification 4401
- Cineraria**
 annual report, Austria 265
 growing, Finland 8843
 temperature, seedling production 8843
- Cineraria diseases**
Coleosporium tussilaginis 2216
Puccinia lagenophorae 2216
- Cineraria seed**, germination, temperature 8843
- Cinnamomum cassia**, essential oil, composition 2325
- Cinnamon**
 alkaloids, determination 3017
 bibliography 8974
 essential oil
 composition 3015
 determination 7066
- Circulifer tenellus**, virus vectors, curly top, tomato pests 2871
- Cirsium** spp., as weeds, grapevine 1903, 5840
- Cissampelos pareira**
 alcohols 8012
 alkaloids 7104, 8012
 glycosides 8012
- Cistus** spp., growing, UK 1400
- Citrange**
 as a rootstock
 disease resistance, grapefruit 9092
 grapefruit 6332
 heat resistance 7141
 orange 795, 5547
- Citrange diseases**, collar rot, cause unknown 362
- Citrange seed**
 treatment
 growth substances, GA 1468
 stratification 1468
- Citron**
 enzyme activity, fruit, ripening 8096

Citron contd.

- enzymes, fruit 8095
- respiration, fruit, maturation 8094
- virus indicator plants, exocortis virus, citrus 2386

Citron diseases, *Fusarium* spp. 5563**Citron fruit**

- amino acids
 - metabolism 8095
 - fruit maturation 8094
- ascorbic acid, metabolism, ripening 8096
- maturity
 - ascorbic acid, metabolism 8096
 - proteins, metabolism 8094
- proteins, metabolism, fruit maturation 8094

Citrullus colocynthis

- enzyme activity, seed 9032
- as medicinal plants 9032

Citrumelo, as a rootstock, grapefruit 6332**Citrus**

- annual report
 - Australia 1466, 4782, 9068, 9074
 - Cyprus 3980
 - Italy 8050
 - Sabah 9075
 - Tunisia 3981
 - USA 790-791, 2375, 8051
- breeding and selection
 - frost resistance 3106
 - interspecific hybridization 5545
 - pest resistance, *Tylenchulus semipenetrans* 3100
 - transcaucasus 1467
- chromosome numbers 7123
- cover crops
 - grass sward 5551
 - Pueraria* spp. 5551
 - Stylosanthes* spp. 5551
- cuticle, studies, annual report, UK 2380
- drought, resistance, rootstocks 3988
- dwarfing
 - growth substances 3141
 - MH 2402
- enzyme activity, fruit abscission layer 3146
- frost
 - injury, critical temperatures 4159
 - protection
 - fogging 5550
 - wind machines 5549
- resistance
 - breeding and selection 3106
 - electrical conductivity 4994
 - varieties, USSR 3143
- fungicides 3320
 - application, general, adjuvants 5686
 - residues
 - determination
 - fruit thiabendazole 7156
 - phenylphenol 4018
 - thiabendazole 4806
 - fruit, thiabendazole 4806, 4813
- genetics 7123
- grading, classification 5578
- growing
 - Argentina 1707
 - containers, fruiting 869
 - Italy 357
 - South Africa 5544
 - transcaucasus 1467
 - USSR 9077
 - Venezuela 8119
- halimii*, description 3985
- harvesting
 - fruit, loosening 4012
 - mechanical, fruit, loosening 4012
- herbicides 3322
 - injury, dichlobenil 3989
 - toxicity, picloram, dicamba 2495
- hybrids
 - disease resistance
 - Phytophthora citrophthora* 6329
 - P. parasitica* 6329
 - fruit, ascorbic acid 3158
 - interspecific 3097, 5545
- insecticides 3318
- intercropping
 - economics 9082
 - vegetables 9082
- irrigation
 - equipment 4039
 - requirements, disorder incidence 3990

Citrus contd.**irrigation contd.**

- soil, compaction 3990
- sprinkler
 - acaricides, application 3135
 - fungicides, application 3135
 - insecticides, application 3135
- medicinal properties 808
- mycorrhiza, seedling growth 7132
- nursery management 6330
- planting, high density, report, Sri Lanka 6323
- polyembryony 9079
- products and by-products, pulp, animal fodder 8103
- pruning and training, drought damaged plants 3988
- research, Italy, new journal 4118
- ringing 4014
- seedling, growth, mycorrhiza 7132
- spraying
 - equipment
 - air blast 3136
 - types compared 3136-3137
- storage
 - buildings, pre-cooling 1503
 - dips, thiabendazole, determination 2403
 - diseases, control 9106
 - wax coatings
 - fungicides
 - biphenyl, residues 2404
 - sodium 2-phenylphenate, residues 2404
- temperature, measurement, microclimate 5549
- transport, heat exchange, coefficients 6364
- weed control 2495, 3108, 3989, 6338-6339
 - Neomillspaughia amarginata* 6340
- nurseries 1475
 - review 5552, 8121
- weeds, survey 6337
- wind, damage 1473-1474
- windbreaks, bamboo plants 1473

Citrus diseases

- Australia 6518
- cachexia, heat treatment 7141
- Cercospora angolensis* 4000
- Colletotrichum gloeosporioides* 797, 6346
- concave gum, heat treatment 7141
- decline 2392
- degeneration virus 3126
- Deuterophoma tracheiphila* 9091
- Diaporthe citri* 797, 9093
 - irrigation, fungicide application 3135
- dweet mottle, heat treatment 7141
- Elsinoë fawcetti* 797
- exocortis
 - heat treatment 7141
 - transmission, tool decontamination 3125
- exocortis virus 363
 - survey, Japan 2389
- fruit rots
 - control 8097
 - post-harvest dips 8097
- Fusarium* spp. 369
- greening, incidence, Ghana 7142
- greening virus, Philippines 2390
- Guignardia citricarpa* 797
- impietratura 3999
- infectious variegation, heat treatment 7141
- infectious variegation virus 3124
- Likubin 2388
- mycoplasma 4795
 - review 2387
- Mycosphaerella horii* 797
- natsudaikai dwarf virus 3124
- Phytophthora citrophthora* 2392, 4001
 - hybrid resistance 6329
 - rootstock resistance 4787
 - soil, fumigation 4787
- P. parasitica* 2392
 - hybrid resistance 6329
 - rootstock resistance 4787
 - soil, fumigation 4787, 6348
- P. spp.* 2392
- P. spp.* 4803
- psorosis 4797
- psorosis-A, heat treatment 7141

Citrus diseases contd.

- Pythium aphanidermatum* 2392
 - rumple 8074
 - seedling yellows-tristeza, heat treatment 7141
 - storage diseases, control 9106
 - tatterleaf-citrange stunt, heat treatment 7141
 - tristeza
 - heat treatment 7141
 - histology 5560
 - incidence, Ghana 7142
 - vectors, *Toxoptera citricidus* 4798
 - tristeza virus 2388
 - rootstock resistance 4799
 - various, Togo 5599
 - vein enation, heat treatment 7141
 - virus 4795
 - conference 5557
 - indicator plants 4795
 - review 2387
 - South Africa 4795
 - virus-tested plants, propagation 794
 - Xanthomonas citri* 797, 4475
 - pest relationships 5562
 - varietal resistance 8059
 - xyloporosis, incidence, Ghana 7142
 - yellow vein, heat treatment 7141
- Citrus disorders**
- creasing, irrigation 3990
 - decline, nematode association 8078
 - granulation, review 1509
 - oleocellosis 4792
 - swazi spot 2385
 - various, Togo 5599
- Citrus flower**
- biology 800
 - bud initiation, growth substances 368
- Citrus fruit**
- abscission 3146
 - ethylene 3146
 - growth substances
 - abscisic acid 3146
 - auxin 3146
 - abscission layer, enzyme activity 3146
 - colour
 - ethylene, treatment 2410
 - growth substances, ethephon 2410
 - composition, oil, peel 371
 - drop 4014
 - growth substances
 - calcium orthophosphate 2402
 - 2,4-D 2402
 - GA 2402
 - MH 2402
 - potassium dihydrogen phosphate 2402
 - loosening, treatments, review 4012
 - nucleic acids 4817
 - composition 4014
 - pigment accumulation, growth substances, ethephon 2410
 - quality, standards 5578
 - thinning
 - growth substances
 - 2,4-D 2402
 - MH 2402
 - wax coatings 4809
- Citrus growth substances**
- application, with plant protectants, GA 5569
 - dwarfing
 - CBBA 3141
 - chlormequat 3141
 - CPA 3141
 - IT-3233 3141
 - IT-3456 3141
 - methyl caprate 3141
 - MH 2402
 - naptalam 3141
 - potassium azide 3141
 - endogenous 4014
 - fruit, chloroplasts, development 2399
 - fruit
 - abscission
 - abscisic acid 3146
 - auxin 3146
 - drop
 - calcium orthophosphate 2402
 - 2,4-D 2402
 - GA 2402
 - MH 2402

Citrus growth substances *contd.*fruit *contd.*drop *contd.*

potassium dihydrogen phosphate

2402

thinning

2,4-D 2402

MH 2402

Citrus jambhiri

nutrition, iron 1480

root

injury

hydrogen sulphide 9081

waterlogging 9081

soil, waterlogging, hydrogen sulphide, root

injury 9081

C. junos

carbohydrates

content

disease resistance 3131

frost resistance 3131

diseases, *Deuterophoma tracheiphila*,

resistance 3131

flower, biology 3143

frost

resistance

carbohydrates, content 3131

leaf, composition 3131

nitrogen, content 3131

fruit

biology 3143

parthenocarpic 3143

pectins, content 3160

nitrogen

content

disease resistance 3131

frost resistance 3131

as a rootstock

lemon 4788

mandarin and tangerine 8062

tissue culture, embryo, endosperm tissue

7127

Citrus leaf

chlorine, content, wind damage 1474

iron, content 1480

Citrus macrophylla

as a rootstock

citrus 8063

lemon, annual report, Australia 4782

Citrus nutrition 864

copper

deficiency symptoms 7140

plant analysis 7140

soil analysis 7140

general, leaf analysis 5681

iron

deficiency 1480

sources

compared 1480

manganese, deficiency, calcareous

soils 1480

magnesium, sources, limestone 3996

manganese, deficiency, calcareous soils,

iron, sources 1480

Citrus pests 1696*Aceria sheldoni* 4003

ants 4003

Aonidiella aurantii 4003

biological control 9096-9097

parasites, *Aphytis melinus* 1492, 1494

population studies 799

Aspidiotus hederae, parasites, *Aphytis**melinus* 1492

Australia 6518

Brevipalpus californicus, predators 1489*Chrysomphalus aonidum* 4004

biological control 1491

C. dictyospermi, parasites, *Aphytis**melinus* 1492*Dialeurodes citri* 7148

fungal parasites 8081

Eutetranychus orientalis, predators

1488-1489

Gascardia destructor 6350*Helicotylenchus* spp., population studies,

decline association 8078

Helicoverpa armigera 4003*Lecanium deliae*, parasites, Hymenoptera

6351

mealy bugs

biological control 9096

integrated control 9096

mites 3324

Citrus pests *contd.*

nematodes 446

Panonychus citri 821*Phyllocnistis citrella* 367

disease complex 5562

Phyllocoptruta oleivora 3137*Planococcus citri* 4003*Pseudococcus comstocki*, population

survey, sex traps 5565

Radopholus similis 2394

review, Bolivia 5671

Rotylenchulus reniformis 2394

scales

biological control 1490, 9096

integrated control 9096

parasites 7146

Scirtothrips aurantii 4003*Toxoptera citricidus* 4003

virus vectors, tristeza 4798

Trioxa erytraea 4003

control 4804

parasites 5566

Tylenchulus semipenetrans 2394

control, cultural methods 4002

population studies, decline association

8078

rootstock resistance 4787

soil, fumigation 4787

various

biological control 9096

integrated control 9096

Togo 5599

Xiphinema spp., population studies,

decline association 8078

Citrus plant

composition, soil oxygen concentration

2383

flavonoids, content 808

glycosides, content 808

Citrus propagation

budding 1469, 6330

bud wood, certification, India 8058

on mother plant 4789

embryo, tissue culture 1471

grafting, shoot-tip, virus-tested plants

794

nucellus, tissue culture 1471

seed 6330

Citrus rootstocks*Clausena anisata* 1470

comparative trials

Israel 9080

root, porosity 3987

compatibility 4795

disease resistance, tristeza virus 4799

lime (*Citrus*), review 3102

Mozambique 2381

Poncirus trifoliata 4799, 7125

propagation, seed 6330

Rangpur lime, disease incidence 5558

rough lemon 4795

-scion relationships

drought resistance 3988

incompatibility 1470

seedling

disease resistance 4787

pest resistance 4787

Severinia buxifolia 6331**Citrus soil**

fumigation

Phytophthora citrophthora, DD 4787*P. parasitica*

DD 4787

methyl bromide 6348

seedling growth, methyl bromide 7132

Tylenchulus semipenetrans, DD 4787

micro-organisms, seedling, growth 7132

oxygen concentration, plant composition

2383

pH, limestone, sources compared 3996

Citrus spp.

amino acids, content, fruit 7157

essential oil, content, peel 6368

fruit, composition 7157

organic acids, content, fruit 7157

pests

Diaphorina citri

alternative hosts 8082

population studies 8082

Tylenchulus semipenetrans, resistance

3100

Citrus spp. *contd.*

products and by-products

peel

animal fodder 6368

essential oil, content 6368

hesperidin, content 6368

pectins, content 6368

sugars, content, fruit 7157

tissue culture

embryogenesis 8087

ovary 8087

Citrus varietiesdisease resistance, *Xanthomonas citri*

8059

tropics 5546

Tunisia 4155

Citrus wilsonii, as a rootstock, orange 4788*Cladosporium carpophilum*, control, peach

diseases 7448

C. fulvum

host reactions, tomato diseases 5355

resistance

tomato diseases 2111, 2859

annual report, Netherlands 6772

tomato, annual report, UK 5884

tomato diseases 2875, 4552

varietal resistance, tomato diseases 675,

1280, 3792, 7772

C. sicophilum, fig diseases 8450**C. spp.***Dioscorea* spp., diseases 6297

seed-borne, spinach diseases 6785

spore numbers, grapevine diseases 5858

vectors, aphids, bean (*Vicia*) diseases

8708

Clarkia spp.

seed, sowing, peat 7606

taxonomy 266

Clasterosporium carpophilum

aerial spraying, cherry diseases 8438

apricot diseases 63

stone fruits, diseases, 5699

varietal resistance, cherry diseases 8438

Clausena anisata, as a rootstock, citrus

1470

Clematis

annual report, Netherlands 4604

breeding and selection, annual report,

Canada 8836

Clematis diseases*Ascochyta clematidina* 3929*Coniothyrium clematidis* 3929*C. clematidis-rectae*, annual report,

Netherlands 6961

Clematis spp.

breeding and selection 3928

pollen, viability 3928

seed, treatment, gamma rays 753

seedling, emergence, seed treatment,

gamma rays 753

Cleome hassleriana

flower, development 8876

growth substances

endogenous

flower

abscission 8876

development 8876

translocation, IAA 7881

translocation, studies, growth substances

7881

C. spinosa, growth substances, endogenous,

determination, IAA 7289

C. viscosa

alkaloids 4731

leaf, morphology 4731

saponins 4731

seed, morphology 4731

sterols 4731

tannins 4731

Clepsia spectrana, population studies,

mechanical harvesting, black currant

pests 1049

Clorodendron spp.

flower, development, growth substances

7953

flowering, photoperiodism, light intensity

7953

growing, in pots, annual report,

Netherlands 6127

growth substances

flower

development

chlormequat 7953

Clerodendron spp. contd.

- growth substances *contd.*
- flower *contd.*
- development *contd.*
- GA 7953
- shoot
- growth
- chlormequat 7953
- GA 7953

Climate

- disease incidence, *Peronospora parasitica*, cabbage 8622
- microclimate
- growth studies 8296
- orchards, annual report, UK 903

Clivia flower, bud initiation, annual report, Belgium 8835**Clivia spp.**

- flowering 2962
- pollen tube, structure 2951

Clove

- bibliography 8974
- essential oil
- composition 3018, 7965
- determination 7066
- growing, Malagasy Republic 3939
- Malagasy Republic, annual report, France 754
- research, Malagasy Republic 3939

Cnephasiella incertana, hop pests, annual report, German Federal Republic 340, 7087**Coal ash, ornamentals plant growing 8857****Coal dust, vegetables growing, nutrition 7604****Cobalt**

- amino acids, content, tomato 8772
- application
- foliar
- disease incidence, grapevine 7568
- grapevine 7568

- fruit
- composition, black currant 8486
- size, black currant 8486
- nitrogen, fixation, pea 2814
- rhizosphere, micro-organisms, tomato 8772
- water relations, melon (cantaloup and musk) 2773

Coccinellids

- predator on
- Aphis craccivora*, legumes 6846
- Macrosiphum pisi* 1232

Coccinia indica, alkaloids 8013**Coccomyces spp., varietal resistance, cherry diseases 4237****Coccus viridis, control, coffee pests 9169****Cochliobolus lunatus, sugar cane diseases 4097****Coconut****annual report**

- Jamaica 4851
- Nigeria 9181
- Sarawak 4036
- Sri Lanka 7185

arboricides

- cacodylic acid 3189
- 2,4-D 2 3189
- picolinic acid 3189
- sodium arsenate 3189

breeding and selection 1556-1557, 3187, 6397

- seed, production 8138

cover crops

- Pueraria javanica*
- pests, alternative hosts, *Contheylea rotunda* 9156
- weed control 9147

economics, India 9150**enzyme activity, nut, milk, plant nutrient status 4853****growing**

- Fiji 3187
- Indonesia 9147
- Malagasy Republic 4051
- Portuguese East Africa 7186

growth-palm age relationships 1567**hybrids 831**

- seed, production 5615, 6398

irrigation 9150

- requirements 4052
- saline and fresh water mixed 4052
- saline water 4052

Coconut contd.**irrigation contd.**

- well-point system 4852
- oil, production 1568
- plant
- anatomy 388
- morphology 388

planting

- material, raised in plastic bags 1558
- seedling, selection 6399

pollen

- collection, fluid-bed dryer 9160
- production 5615
- pollination, artificial, seed production 5615

rainfall, yield variations 9148**research, Fiji 3187****seedling**

- development 6399
- production 9149
- raising, plastic bags 1558
- water relations, nut drop 1565
- weed control 7187, 8141
- cover crops 9147
- Eupatorium odorata* 8140
- Imperata cylindrica* 9147
- nurseries 9149

Coconut diseases**cadang-cadang 2447, 3188****review 9154****cause uncertain 1561****Ganoderma lucidum 4053****heart rot 6400****Helminthosporium incurvatum, nitrogen****nutrition 9149****lethal yellowing 832-833, 1559, 4054, 4854****annual report, Jamaica 4851****control, antibiotics 5616****root (wilt) 6401****transmission, soil 9153****vectors, Stephanitis typicus 6402****root (wilt) disease 1560****various, Togo 5599****wilt 4053****Coconut disorders****leaf scorch decline, waterlogging 9152****lethal frond-drop 1555****various, Togo 5599****Coconut flower, perianth aestivation 4831****Coconut fruit****drop**

- growth substances
- chlorfurenol 1566
- ethephon 1566

Coconut growth substances**fruit****drop**

- chlorfurenol 1566
- ethephon 1566

Coconut, nut**drop, water relations 1565****extracts, tissue culture media 6206****milk**

- potassium, content, plant nutrient status 4853

- use, tissue culture, embryo, seed age 1605

proteins, content 4941**Coconut nutrition****chlorine 9151****general, nut milk analysis 4853****nitrogen**

- disease incidence, *Helminthosporium incurvatum* 9149

nurseries 9149**NPK 1555, 9150****sulphur, leaf analysis 3173****sulphur deficiency 841****Coconut pests 1696****Aceria guerreronis 389****control 9155****Brontispa longissima 2444****Coelaenomenodera elaeidis, population studies 4877****Contheylea rotunda 1562****alternative hosts 9156****control 8142****Eumossula gracilis, biological control 9158****insects, control, review 1532****Nephantis serinopa 3190, 9157****Oryctes rhinoceros 2444****Coconut pests contd.****Parasa pallida, Ivory Coast 9188****P. viridissima, Ivory Coast 9188****Promecotheca cumingi****parasites**

- Achrysocaris promecothecae* 8143
- Dimmockia javanica* 8143

P. papuana 2444**biological control 9158****Pseudonicraza szentia, biological control 9158****rats**

- control, Warfarin blocks 7188
- damage 2448
- assessment 1564

Rhynchophorus ferrugineus 1563**R. spp. 2444****rodents 7170****Scapanes australis 2444****Segestidea spp., biological control 9158****Stephanitis typicus****control 9159****vectors, root (wilt) 6402****various, Togo 5599****Xylotrupes spp. 2444****Coconut propagation, vegetative, annual report, UK 8139****Coconut root, water, absorption 4052****Coconut seed**

- germination, seedling development 6399
- production 3187, 6398
- pollination 5615

Coconut soil

- cultivation, weed control, sulphur deficiency 841
- sterilization, chemicals, virus control 9153

types

- disorder incidence 9152
- waterlogging 9152
- waterlogging, disorder incidence 9152

Coconut varieties

- macapuna hybrids 1555
- oil, content 1568

Coelaenomenodera elaeidis**oil palm pests 5638****population studies**

- coconut pests 4877
- oil palm pests 4877

Coffea spp., seed, chlorogenic acids, content 1585**Coffee**

- aerial, spraying, insecticides, *Ceratitis capitata* 5623

amino acids

- applied 4060
- metabolism 4060

annual report**Burundi 4031****East Africa 4855****East African Community 5617****Kenya 3191****Nigeria 4035****Rhodesia 4829****Sarawak 4036****UK 2449****Zambia 8144****bibliography 390****breeding and selection**

- disease resistance 391
- Ivory coast 1569

caffeine

- biosynthesis, seed, fruit 4867
- content, seed, fruit 4867
- translocation 4863

- calcium, content, leaf, phosphorus nutrition 4859

climate 8145**colloquium 9172****cover crops**

- soil, conservation 3161, 5618
- weed control 1571

- cuticle, properties, berry, disease resistance 7193

- dormancy, growth substances, endogenous 7196

economics, Brazil 3192

- enzymes, cotyledon, varietal differences 4059

- epiphytes, fungi, *Marasmius scandens* 823

flowering 7195

Coffee contd.

- fungicides
 - application, methods compared 3206
 - injury, mercury compounds 3193
 - insect control, *Ascotis selenaria*, fentin hydroxide 3205
 - residues, leaf, copper 2451
 - yield increase 836
 - ground cover plants, legumes 7190
 - growing
 - India 8145
 - as an intercrop
 - coconut, annual report, Jamaica 4851
 - oil palm, annual report, Nigeria 9181
 - harvesting
 - bean, quality 4866
 - mechanical
 - air separator 1587
 - nets 1587
 - washing machine 1587
 - humidity, relative, disease incidence, *Colletotrichum* spp. 5620
 - hybrids, identification 7189
 - irrigation 3308
 - spray, equipment 6408
 - sprinkler 9165
 - light, intensity, plant composition 1588
 - as an ornamental plant, growth substances, annual report, USA 6129
 - phosphorus
 - absorption 6404
 - translocation 6404
 - photoperiodism 4864
 - planting, high density 7195
 - pollination, compatibility, Malagasy Republic 1586
 - processing
 - bean, quality 4866
 - drying
 - equipment 4865
 - under plastic 7197
 - products and by-products, pulp, composition 7200
 - pruning and training 392
 - shade 8145, 9162
 - annual report, Sri Lanka 3171
 - nutrition, leaf, analysis 1570
 - pest incidence, *Stephanoderes hampei* 9162
 - plants, *Erythrina lithosperma* 9163
 - weed control 4858
 - soilless culture, nutritional studies 6405
 - species, identification 7189
 - spraying
 - aerial 3206
 - equipment, hydraulic sprayer 4058
 - statistical
 - sampling
 - bean 8146
 - fruit 8146
 - leaf 8146
 - shoot 8146
 - storage
 - buildings
 - humidity, control, solar energy 2453
 - ventilation, control, solar energy 2453
 - pest incidence, *Aracercus fasciculatus* 8156
 - sucker, control 7195
 - tissue culture, embryo 8155
 - transpiration
 - copper nutrition 2452
 - foliar nutrition 9171
 - nitrogen nutrition 9171
 - potassium nutrition 9171
 - weed control 4056, 4858, 7190, 9164
 - cover crops 1571
 - ground cover plants 7190
 - review 8120–8121
- Coffee bean**
- composition 7198
 - identification, robusta 4062
 - nucleic acids, extraction 3208
 - oil, content 8159
 - processing 1589
 - quality 7199
 - Ethiopia 4866
 - sampling, methods 8146
 - toxins 7199
 - water, content, determination 4061

Coffee diseases

- Armillaria mellea* 4057
- Ascochyta coffeae* 3203
- Botrytis cinerea* 4860
- Ceratocystis fimbriata*
 - resistance 391
 - varietal resistance 4055
- Cercospora coffeicola* 1574, 1576
 - nitrogen nutrition 9167
- Colletotrichum acutatum* 3204
- Colletotrichum coffeanum* 836, 3201–3202, 3204, 8150
 - control 4861
 - fungicides, application, methods 3206
 - host nutrition, foliar 1579
 - India 8148–8149
 - resistance, cuticular wax 7193
 - varietal resistance 2450
- C. gloeosporioides* 3204
- C. spp.* 5620
- Corticium koleroga* 8150
- Fomes* spp. 4057
- Fusarium solani* 8151
- F. spp.*, seed treatment 3193
- Ganoderma* spp. 4057
- Glomerella cingulata* 3204
 - incidence 1575
- Hemileia* spp., fungicides, application, methods 3206
- Hemileia vastatrix* 396, 836, 1577–1578, 2451, 3316, 4862, 5621, 7194
 - biological control 1580
 - hybrid resistance 1569
 - parasites, *Verticillium* spp. 7194
 - varietal resistance 395
- Marasmius* spp. 823
- Pythium* spp., seed treatment 3193
- various, Togo 5599

Coffee disorders

- die-back 6406
- June drop 8150
- various, Togo 5599

Coffee flower

- bud development, growth substances, endogenous 7196
- bud initiation, photoperiodism 4864

Coffee fruit

- anatomy, development 4856
- ascorbic acid, content 8158
- caffeine, content 1588
- development, caffeine content 4867
- ripening
 - growth substances, ethephon 837
 - irrigation 9165
- sampling, methods 8146
- wax, disease resistance, *Colletotrichum coffeanum* 2450

Coffee growth substances

- defoliation, Ethrel 1574
- disease
 - expression
 - 2,4-D 1574
 - NAA 1574
- endogenous, flower bud, development 7196
- fruit, ripening, ethephon 837

Coffee hybrids, Arabusta 1569**Coffee leaf**

- area, copper nutrition 2452
 - caffeine
 - content
 - leaf age 1588
 - light intensity 1588
 - composition
 - copper nutrition 393
 - major elements, shade 1570
 - flavonoids, content, disease resistance, *Ceratocystis fimbriata* 4055
 - nitrogen
 - content
 - leaf age 1588
 - light intensity 1588
 - phenolic compounds, content, disease resistance, *Ceratocystis fimbriata* 4055
 - sampling, methods 8146
- Coffee nutrition** 864, 3196
- boron 3197
 - deficiency 9166
 - symptoms 3197
 - calcium
 - deficiency, symptoms 3198
 - leaf analysis 1570, 3198

Coffee nutrition contd.

- copper 2452, 6405
 - toxicity 393, 6405
 - iron, deficiency 9166
 - magnesium
 - deficiency 9166
 - symptoms 3198
 - leaf analysis 1570
 - manganese
 - availability 7191
 - deficiency 9166
 - toxicity 7191
 - nitrogen 3197
 - application, foliar, *Colletotrichum coffeanum* incidence 1579
 - deficiency 9166
 - symptoms 3197–3198
 - disease incidence, *Cercospora coffeicola* 9167
 - leaf analysis 1570, 3198
 - v soil analysis 3195
 - potassium imbalance 9167
 - sources, transpiration 9171
 - NPK 5619
 - application, with plant protectants 9167
 - phosphorus 4859, 6404
 - deficiency 9166
 - symptoms 3198
 - leaf analysis 1570, 3198
 - v soil analysis 3195
 - toxicity 4859
 - potassium 3197
 - deficiency 9166
 - symptoms 3197–3198
 - leaf analysis 1570
 - nitrogen imbalance 9167
 - sources, chloride, leaf chlorine content 3199
 - sulphur 1573
 - deficiency, symptoms 3198
 - leaf analysis 1573, 3173
 - zinc 3197
 - absorption
 - leaf 394, 3200
 - sources 7192
 - spray pH 7192
 - deficiency 9166
 - symptoms 3197
- Coffee pests** 1696
- Antestiopsis lineaticollis*, annual report, Burundi 4032
 - A. spp.* 6407
 - Aracercus fasciculatus*, bean storage 8156–8157
 - Ascotis selenaria* 6407
 - biological control 1584
 - fungicides, fentin hydroxide 3205
 - Ceratitidis capitata* 397
 - aerial spraying 5623
 - Coccus viridis*, control 9169
 - Eupterote* spp. 1582
 - fruit flies 6407
 - general, review 7282
 - Hypothenemus hampei*, population studies, host orientation 9170
 - insects
 - biological control 5622
 - control, review 1532
 - Leucoptera meyricki* 1583
 - L. spp.* 6407
 - Meloidogyne coffeicola* 1581
 - M. exigua* 1581
 - Brazil 9168
 - M. incognita* 1581
 - incidence, Brazil 8152
 - Niphadolepis alianta* 1583
 - Parasa* spp. 1583
 - Pratylenchus brachyurus* 1581
 - P. coffeae* 8153
 - Radopholus similis*, alternative hosts 7608
 - review, Bolivia 5671
 - Stephanoderes hampei*, shade 9162
 - tortrix moths 1583
 - various, Togo 5599
 - Xiphinema brevicolle* 1581
 - Xyleborus morstatti*, hybrid resistance 1569
 - Xylosandrus morigerus*
 - alternative hosts
 - avocado 8154
 - Salix humboldtiana* 8154

Coffee plant, composition, copper nutrition 2452

Coffee propagation
cuttings 8147, 9161
adventitious buds 6403

Coffee root
anatomy 3172
cation exchange capacity, determination 398
composition, copper nutrition 393
systems 6404

Coffee seed
anatomy, development 4856
ascorbic acid, content 8158
chlorogenic acids, content 1585
development, caffeine content 4867
germination 4857
fruit, ripeness 4857
treatment, fungicides 3193

Coffee shoot, sampling, methods 8146

Coffee soil
erosion 3161, 5618
manganese
availability 7191
toxicity 7191
nutrient, availability 835
pH 835
potassium, availability 1572

Coffee varieties
bean, oil, content 8159
comparative trials, Ecuador 834
drought resistance 3194
134, S.12 Kaffa 3207

Cola
annual report, Nigeria 4035
herbicides
injury
dalapon 8134
diuron 8134
MSMA 8134
weed control 8134

Cola pests, *Crematogaster buchneri* 7201

Cola seed, treatment, annual report, Ghana 7177

Colaspis hyptochlora, banana pests 380

Colchicaceae, ornamental species, Denmark 3863

Colchicine treatment
cell development, *Allium* spp. 2087
cell division, coleus 3901
coffee, annual report, Nigeria 4035
growth substances, content, bean (*Phaseolus*) 6851
guava, annual report, India 4034
proteins, metabolism, carrot 4591

Colchicum spp., seed, sugars, content 8883

Cold (see also Frost)
injury
apple 6533
nursery stock, annual report, UK 8318
protection
Aronia melanocarpa 7487
forest belts
apple 4186
cherry 4186
plastic films, holly 7037
white paint, fruit trees and plants 1730
resistance
cherry, annual report, USA 3348
electrical potential, cucumber and gherkin 4458
grafting height, apple 4180
growth substances, tomato 6100
hardening, respiration, pea 654
mechanisms, seedlings, beans (*Phaseolus*) annual report, UK 1934
nitrogen nutrition
lawns and sports turf 304
Stenotaphrum spp. 2179, 5448
nucleic acid content, *Albizia* spp. 1398
photoperiodism
pyracantha 5485
weigela 5485
plant anatomy, *Albizia* spp. 3927
plant nutrition
apple 4180
lemon 1483
potassium nutrition, lawns and sports turf 3895

Cold contd.
resistance contd.
proteins, content, *Albizia* spp. 1398
seed treatment, melon (cantaloup and musk) 7677
studies, strawberry, annual report, Canada 6668
testing
bean (*Phaseolus*) 2009
holly 3912
responses, rhubarb 7759

Cold treatment
flowering, freesia 7897
photosynthesis, sugar cane 8247
seedling, cauliflower and broccoli 7659

Coleophora malivorella, population studies, apple pests 956

C. serratella, population studies, apple pests 956

Coleoptera, medicinal plants, pests, Bulgaria 1423

Coleus
cell, division, xylem formation 3901
chlorophyll, content, leaf, fluorine toxicity 8922
colchicine treatment, cell division 3901
enzyme activity
leaf abscission layer 5991
wound healing 280, 307
fluorine, toxicity, leaf pigments content 8922
light, interaction, growth substances 1375
ozone, injury 1322
pigments, content, leaf, fluorine toxicity 8922
stomata, structure, development 5494
sulphur dioxide, injury 1322

Coleus growth substances
application, methods, morphactins 1349
dwarfing, morphactins 1349
endogenous
leaf, senescence 8923
translocation 8923
IAA translocation, abscisic acid 8923
metabolism, NAA, α -decylalacetic acid 3900
translocation
IAA 1375, 4676, 5453
NAA, α -decylalacetic acid 3900

Coleus leaf
abscission, enzyme activity 5991
abscission layer, enzyme activity 5991
colour
nitrogen nutrition 6133
potassium nutrition 6133
pigments 8922
senescence, growth substances, endogenous 8923

Coleus nutrition
nitrogen 6133
phosphorus 6133

Coleus shoot, xylem formation, tissue culture 3901

Colletotrichum acutatum, coffee diseases 3204

C. camelliae, NPK nutrition, tea diseases 4897

C. capsici
damage, *Piper betel*, diseases 1459
host phenolic compounds, content, capsicum diseases 5325
incidence, *Piper betel*, diseases 1459

C. coccodes
host-pathogen relationships, tomato diseases 4569
nematode complex, tomato disease 8782
varietal resistance, tomato diseases 2107

Colletotrichum coffeanum
coffee diseases 836, 3201-3202, 3204, 8150
annual report
East African Community 5617
Kenya 3191
control, coffee diseases 4861
fungicides, application, methods, coffee diseases 3206
host nutrition, foliar, coffee diseases 1579
India, coffee diseases 8148-8149
resistance, cuticular wax, coffee diseases 7193
varietal resistance, coffee diseases 2450

Colletotrichum contd.

C. dematium
papaw diseases 1610
pathogenicity
apple diseases 8515
nectarine diseases 8515
strawberry diseases 8515
tomato diseases 8515
peperomia diseases 6203
f. *spinaciae*, spinach diseases, annual report, German Federal Republic 7597
symptoms, strawberry diseases 8515
varietal resistance, tomato diseases 2107

C. destructivum, varietal resistance, tomato diseases 2107

C. falcatum, planting material, treatment, sugar cane diseases 8229

Colletotrichum fragariae
strawberry diseases 1867, 1885, 5100
annual report, USA 6692
varietal resistance
strawberry diseases 5814
tomato diseases 2107

C. gloeosporioides
Averrhoa spp., diseases 859
avocado diseases 1464, 2377
annual report, USA 8051
citrus diseases 797, 6346
clonal susceptibility, rubber diseases 8182
coffee diseases 3204
control, anthurium diseases 7876
fruit storage, mango diseases 4873
heat treatment, papaw diseases 8171
mandarin and tangerine diseases 4800
mango diseases, annual report, USA 1530

f. melongenae
post-harvest dips, eggplant diseases 4548
varietal resistance, eggplant diseases 5329
orange diseases 7143
Passiflora foetida, diseases 8966
post-harvest dips, papaw diseases 8171
resistance, eggplant diseases 5328
rubber diseases 844, 6423-6424
seasonal susceptibility, rubber diseases 8182
secondary leaf fall, prevention, rubber diseases 8183
storage dips, mango diseases 7205, 8163
varietal resistance, tomato diseases 2107

C. lagenarium
biological control, melon (cantaloup and musk) diseases 5952
host enzyme activity, melon (cantaloup and musk) diseases 5220
host proteins, content, melon (cantaloup and musk) diseases 7685

C. lindemuthianum
bean (*Phaseolus*) diseases
annual report
German Federal Republic 7599
UK 3611
host-pathogen relationships, bean (*Phaseolus*) diseases 3706
host proteins, metabolism, bean (*Phaseolus*) diseases 3705
incidence, Brazil, bean (*Phaseolus*) diseases 5235
resistance, bean (*Phaseolus*) diseases 5981
seed-borne, bean (*Phaseolus*) diseases 5982
seed treatment, bean (*Phaseolus*) diseases, annual report, UK 1934
varietal resistance, bean (*Phaseolus*) diseases 3695

C. spp.
aerial spraying, v ground spraying, tomato diseases 2876
alternative hosts, *Solanum torvum*, eggplant diseases 6051
cacao diseases, annual report, Sabah 9135
coffee diseases 5620
control, bean (*Phaseolus*) diseases 8690
eggplant diseases 6051
heat treatment, eggplant diseases 6051
orchids, diseases, annual report, German Federal Republic 8837

Subject Index

- Colletotrichum* spp. *contd.*
 static diseases 6163
- Collybia velutipes*
 culture media 7842
 edible fungi 7842
- Columnnea* spp., growing, as pot plants,
 production 5390
- Commelina* spp., as weeds, oil palm 1601
- Commelinaceae**
 chromosomes 4609
 classification 4609
- Commiphora mukul*
 steroids 348
 terpenoids 7105
- Comperiella bifasciata*
 parasite of
Aonidiella aurantii, citrus 9096–9097
Chrysomphalus aonidum, citrus 1491
- Compositae**
 sapogenins 2942
 as weeds, tomato 6069
- Compost**
 amendments
 plastic foam
 orchids 8850
 pot plants 8850
 sterilization, steam, mushroom 699
- Comptonia asplenifolia*, essential oil,
 composition 8995
- Computer**
 use
 chloroplast studies, pea 212
 growth records, grapevine 552
- Conifer bark humus**, cut flowers growing
 7855
- Conifer litter**, begonia growing, nutrition
 6167
- Conifers**
 annual report, Austria 265
 book 7034
 conference, proceedings 7035
 landscape planting, USSR 1386
 moss control, nurseries 743
 propagation
 cuttings
 annual report
 Belgium 8835
 Irish Republic 2909
 roofing, physiology, annual report,
 Italy 6960
 grafting, side- 4688
- Coniothyrium clematidis*, clematis diseases
 3929
- Coniothyrium clematidis-rectae*, clematis
 diseases, annual report, Netherlands
 4604, 6961
- C. diplodiella*, rachis desiccation, grapevine
 diseases 1117
- C. juniperi*, *Juniperus* spp., diseases 1388
- Conotrachelus nenuphar*
 apple pests 4289
 plum pests 4289
- Container-grown plants**
 annual report, UK 8834, 8838
 containers
 papier mâché, colour, soil temperature
 7036
 plastic, colour, soil temperature 7036
 herbicides, root, growth 7847
 irrigation 8943
 annual report, UK 4605
 media
 hardwood bark 1321
 roadside plants 2978
 types compared 4689
 mulching, bark, weed control 8853
 nutrition
 annual report, UK 4605
 nitrogen 8941
 sources, liquid 2170
 winter 2311
 potassium 2311
 pruning and training 2275
 trees and shrubs
 annual report
 Irish Republic 2909
 UK 4605
 weed control 8853
 annual report, UK 4605
- Contarinia nasturtii*, cabbage pests 1174
- C. pisi*, pea pests, annual report, UK 3611
- C. pyrivora*, pear pests 5050
- Contheyla rotunda*
 alternative hosts
 areca pests 9156
 cacao pests 9156
 coconut pests 9156
 coconut pests 1562
 control, coconut pests 8142
- Convolvulus** spp.
 as weeds
 apple, annual report, UK 3347
 artichoke, globe 3633
 asparagus 5291
 black currant 2675
 citrus 3989
 grapevine 566, 1903–1904, 5838–5840,
 6731–6732, 7561
 lemon 7131
 peach 4252
 tomato 6066
- Copernicia prunifera**
 fibre plants 8049
 as food plants 8049
 geographical distribution 3091
 growing, for wax production 4780
 as medicinal plants 8049
 wax source 8049
- C. spp.**, descriptions 1458
- Copper**
 absorption, orange 6342–6343
 application
 foliar
 capsicum 6892–6893
 coffee nutrition 2452
 injury, orange 4791, 9086
 orange 4791
 precipitants, orange 9086
 residues, orange 9086
 strawberry 5816
 availability
 nitrogen nutrition
 chrysanthemum 8589
 vegetables 8589
 boron nutrition, onion 7750
 content
 calcium nutrition, orange 1478
 leaf
 phosphorus nutrition, apple 1742
 seasonal variations, apple 6554
 varietal differences, apple 6554
 water relations, apple 1742
 nitrogen nutrition, orange 1478
 potassium nutrition, orange 1478
 seasonal variations, hop 344
 shoot
 root temperature, chrysanthemum
 8863
 seasonal variations, apple 6554
 varietal differences, apple 6554
 deficiency 865, 3299
 apple 1742
 cucumber and gherkin 7683
 diagnosis, enzyme activity, vegetables
 1145
 symptoms
 cauliflower and broccoli nutrition
 1983
 citrus 7140
 determination, ascorbimetry, vegetables
 605
 fruit
 composition
 orange nutrition 1478
 strawberry 5817
 quality, strawberry 5817
 guava nutrition 9173
 leaf, potassium content, orange 9087
 leaf analysis
 citrus 1484
 cucumber and gherkin 7683
 orange nutrition 1478
 sugar cane 412
 plant analysis
 citrus 7140
 sugar cane 6437
 plant composition, coffee 393
 root, growth, control, container-grown
 plants 7847
 rootstock production, pear 5788
 seed treatment, carrot 6108
 soil analysis, citrus 7140
 sources
 chrysanthemum 8589
 vegetables 8589
- Copper contd.**
 toxicity
 coffee 6405
 coffee nutrition 393
 cucumber and gherkin 7683
 cuttings, rooting inhibition, *Kalanchoe*
 spp. 8929
 grapevine 6753
 lettuce 2754
 nitrogen nutrition
 chrysanthemum 8589
 vegetables 8589
 rosetting, apple 1742
 vegetables, tissue culture 121
 water relations, melon (cantaloup and
 musk) 2773
- Copturomimus perseae*, varietal resistance,
 avocado pests 8052
- Corchorus** spp.
 nutritional value 4387
 steroids, biosynthesis 1435
- Cordia boissieri*
 flavones 7106
 flower, composition 7106
- C. verbenacea**, lipids, content 2373
- Cordyceps heteropoda*, fungal parasite,
Melampsalta puer, sugar cane 1638
- Cordyline** spp.
 fluorine, toxicity, cuttings, irrigation water
 7025
 growth substances, endogenous, leaf,
 translocation 706
 propagation
 cuttings
 irrigation, fluorine toxicity 7025
 media, fluorine toxicity 7025
- Coreopsis growth substances**
 plant
 anatomy
 chlormequat 5413
 GA 5413
 root
 growth
 chlormequat 5413
 GA 5413
- Coreopsis plant**, anatomy, growth substances
 5413
- Coreopsis root**
 growth
 growth substances
 chlormequat 5413
 GA 5413
- Coreopsis** spp., essential oil 7984
- Coriander**
 bibliography 8974
 essential oil, composition, determination
 7066
 soilless culture 5487
- Coriander diseases**
Fusarium oxysporum, f. *corianderii*,
 incidence 8981
Protomyces macrosporus 2319
 resistance 2319
- Coriander flower**
 biology 8987
 sex
 growth substances 8987
 2,4-dichlorophenoxybutyric acid
 1407
- Coriander growth substances**
 flower
 sex
 2,4-dichlorophenoxybutyric acid
 1407
 F.W.450 8987
 IBA 8987
 MH 8987
- Coriander nutrition**, organic fertilizers,
 disease incidence, *Fusarium oxysporum*,
 f. *corianderii* 8981
- Coriander seed**, sowing, dates, USSR 4407
- Coriander soil**
 moisture, disease incidence, *Fusarium*
oxysporum, f. *corianderii* 8981
 pH, disease incidence, *Fusarium*
oxysporum, f. *corianderii* 8981
 temperature, disease incidence, *Fusarium*
oxysporum, f. *corianderii* 8981
- Coriander varieties** 1405
- Corn salad**, weed control 7824, 8817
- Corn salad nutrition**, nitrogen 2903
- Corn salad plant**, composition, nitrogen
 nutrition 2903

- Cornus**
annual report, Netherlands 4604
anthocyanins 8958
chlorophyll, content, phytochrome relationships 4937
fluorine, toxicity, plant tolerance 7845
growing, USSR 4299
phytochrome, -chlorophyll relationships 4937
sulphur dioxide, injury, plant resistance 7845
- Cornus growth substances**, retardants, chlormequat 6212
- Cornus leaf**, composition 2304
- Cornus propagation**
cuttings
frame 6134
photoperiodism 1401
treatment
growth substances
IBA 4718
NAA 4718
- Cornus root**, growth, development, soil, temperature 3925
- Cornus soil**, temperature, root, development, growth 3925
- Coronilla varia**
seed
leachate
growth inhibition
seedlings
sweet pea 7625
vegetables 7625
- Corticium koleroga**, coffee diseases 8150
- C. salmonicolor**
clonal resistance, rubber diseases 7222
clonal susceptibility, rubber diseases 844
- C. solani**, marrow diseases 4456
- C. spp.**, control, lawns and sports turf, diseases 8918
- Corynebacterium fascians**, -nematode complex, strawberry diseases 5699
- C. flaccumfaciens**
bean (*Phaseolus*) diseases 1213
seed germination, bean (*Phaseolus*) diseases 8677
varietal resistance, bean (*Phaseolus*) diseases 1205
- C. michiganense**
auxotrophic mutants, tomato diseases 6915
capsicum diseases 3776
control, cross protection, tomato diseases 6916
resistance
Lycopersicon spp., diseases 2872
tomato diseases 2859, 6916
survival on plant debris, tomato diseases 2874
- C. spp.**, tulip diseases, annual report, Netherlands 2219
- Corynespora cassiicola**
cucumber and gherkin diseases, annual report, USA 4368, 8585
papaw diseases 1611
- C. melonis**, infected leaves, tissue culture, cucumber and gherkin diseases 2004
- Coryphantha macromeris**, alkaloids 8014
- C. ramillosa**, alkaloids 8015
- Cosmopolites sordidus**
banana pests 380
annual report, Australia 5600, 9121
- Cosmos seed**, germination 725
- Cotoneaster**
annual report, Netherlands 6962
drought, resistance, leaf, biology 2999
frost, resistance, varieties, France 2158
growing, containers 2917
species, drought resistance 2999
- Cotoneaster leaf**, biology, drought resistance 2999
- Cotoneaster propagation**
cuttings, media 708
seed 2917
- Cotoneaster seed**
germination 8959
viability 8959
- Cotoneaster varieties**, frost resistance 2158
- Couepia polyandra**, fruit, description 9282
- Coumarins**
biosynthesis
disease resistance, carrot 2141
ethylene treatment, carrot 2141
- Coumarins contd.**
content, *Murraia paniculata* 3973
- Cover crops**
comparative trials, fruit trees and plants 1711
disease incidence, *Fomes lignosus*, rubber, annual report, France 3250
disorder incidence, stalk necrosis, grapevine 7560
Eragrostis spp., soil conservation, tea 8269
Festuca rubra, pest incidence,
Pratylenchus penetrans, peach 7452
fruit trees and plants, annual report, Belgium 4942
grass-lucerne, disorder incidence, chlorosis, cherry 8435
grass sward
citrus 5551
grapevine, annual report, German Federal Republic 6669
hop 3041
peach 1017
pear 1028
plant nutrition, apple 8375
soil, micro-organisms, apple 2559
irrigation compared, pear 2649
legumes
oil palm 7209
rubber 8178, 9211
management
oil palm 6410
root growth, apple 934
Medicago polymorpha, yerba maté 8118
Mikania spp., oil palm 6410
orchards, annual report, Belgium 902
Pueraria javanica
manila hemp 2437
pests, alternative hosts, *Contheylea rotunda*, coconut 9156
weed control, coconut 9147
P. phaseoloides, oil palm 7209
P. spp., citrus 5551
Sorghum vulgare, pest incidence,
Pratylenchus penetrans, peach 7452
Stylosanthes spp.
citrus 5551
soil conservation, tea 8269
tea, annual report, Sri Lanka 8262
weed control, coffee 1571
- Cranberry**
annual report
Canada 2669
USA 5077
anthocyanins
biosynthesis
light 8498
temperature 8498
ethylene, production, fruit, growth substances, ethephon 2691
frost, injury, flower bud, initiation 534
growing
USA 6687
USSR 4299, 7512
light, intensity, anthocyanins, biosynthesis 8498
temperature, anthocyanins, biosynthesis 8498
wild, USSR 7512
- Cranberry flower**
bud initiation 534
frost injury 534
- Cranberry fruit**
composition 101
pigments, biosynthesis, growth substances 2691
size
measurement 5093
seed, number per fruit 5093
- Cranberry growth substances**
ethylene, production, ethephon 2691
pigments, biosynthesis, ethephon 2691
- Cranberry nutrition**, phosphorus, deficiency 1062
- Cranberry seed**, number per fruit, fruit, size 5093
- Cranberry varieties**
annual report, Irish Republic 1857
register, USA 3356
- Crataegus** spp., diseases, *Sphaerotheca* spp. annual report, UK 6128
- Creumatogaster buchneri**, cola pests 7201
- Cress**
enzyme activity, inhibition, growth substances 8986
geotropism, root 8636
pigments, biosynthesis, inhibition, growth substances 8986
water relations, root 1223
- Cress growth substances**
enzyme activity, inhibition, PRB-8 8986
pigments, biosynthesis, inhibition, PRB-8 8986
responses, Triton X-100 7665
- Cress root**
development, growth substances 7665
hair, cytology 2765
- Cress seed**, production, annual report, Belgium 4363
- Cricanemoides ornatus**, sugar cane pests 7246
- Crinodendron hookerianum**
cucurbitacins 8960
as medicinal plants 8960
volatile constituents 8960
- Crinum** spp.
growth 707
pollen tube, growth 2261
tissue culture, pollen 707
- Cristella confinis**, lawns and sports turf, diseases 7928
- Crocus**
forcing 6165
growth phases 3865
pollen studies 4651
- Crocus diseases**, *Uromyces croci* 3317
- Crocus growth substances**, endogenous, leaf, translocation 706
- Crocus** spp., wild, ornamental value 2224
- Cronartium ribicola**
black currant diseases 3520
control, black currant diseases, annual report, German Federal Republic 8481
varietal resistance, black currant diseases 3520
- Crop**, maturity, forecasting, bean (*Phaseolus*) 1220
- Crop yields**
plant physiology, symposium 4
statistical analysis, Boundary Line 1678
- Crotalaria** spp.
alkaloids, extraction 778
pest control, *Nezara viridula*, macadamia, report, USA 6324
- Croton** spp., composition 1451
- Crozophora** spp., as weeds, artichoke, globe 3633
- Cruciferae**, as weeds, tomato 6069
- Crucifers**
light, ultra-violet, reflection, flower 1986
organic acids 6783
pests, *Plutella xylostella*, parasites 4430
- Cryptococcus** spp., leaf, micro-organisms, ozone, bean (*Phaseolus*) 6839
- Cryptodiaporthe castanea**, chestnut (*Castanea*) diseases 1006
- Cryptomyzus ribis**, small fruits, pests 5079
- Cryptostegia** spp., plant, composition, cardenolides 6292
- Cryptus nigropictus**, parasite of, *Ascotis selenaria*, coffee pests 1584
- Cucumber and gherkin**
amino acids, absorption 6831
annual report
Austria 114
Belgium 5148, 8578
Canada 1944, 2734, 5883
Cyprus 3604
German Federal Republic 7598, 8579
Irish Republic 5150
Netherlands 1132, 1135, 8581
St. Lucia 8577
UK 1937, 5154, 6773-6774
USA 1130, 1935, 3616, 4368, 7601, 8585
ascorbic acid, content, humic acid 684
bactericides
absorption, translocation, streptomycin 6849
application, surfactants, adjuvants, streptomycin 6849
breeding and selection 620
disease resistance 621
gynocercous lines 4439

Cucumber and gherkin contd.

- breeding and selection *contd.*
 - parthenocarp 5203
 - for processing 4440
- cadmium, determination 4389
- carbon dioxide
 - supplementary 5216
 - supplementary from diesel exhaust, injury 3625
- carotene, content, leaf, light, intensity 4459
- chlorophyll
 - biosynthesis, ethylene 2779
 - content
 - leaf, light, intensity 4459
 - mutants 8656
 - metabolism 151
- chloroplast
 - chlorophyll content, growth substances 2005
 - number, growth substances 2005
 - cold, resistance, electrical potential 4458
 - compost 4451
 - cucurbitacins, pest resistance 1182
 - cytology, male sterile mutant 1991
 - dark treatment, leaf, optical properties 8659
 - drought, resistance, root, systems 4450
 - electrical potential, cold resistance 4458
 - enzyme activity
 - cotyledons, tissue culture 163
 - growth substances, ethephon 2777
 - humic acid 684
 - root, magnesium toxicity 1997
 - enzymes
 - biosynthesis
 - magnesium nutrition 5963
 - manganese nutrition 5963
 - determination, seedling 162
 - ethylene
 - chlorophyll, biosynthesis 2779
 - interaction, light, chlorophyll biosynthesis 2779
 - production 3688
 - treatment, flower, sex 5968
 - frost, injury, chloroplast, damage, light 2003
- fruiting
 - precocity
 - irrigation 1995
 - light
 - intensity 1995
 - sunlight 1995
 - temperature 1995
- fungicides
 - insecticide mixtures 6820
 - residues, determination, benomyl 7609
- growing
 - Bulgaria 3620–3621
 - frames 2737
 - under glass 1139, 2767
 - artificial illumination 877
 - economics 5156–5157, 5225
 - fruit, leaf, composition 4565
 - labour requirements 5156–5157
 - pest control 3627
 - in greenhouses
 - glass 2738
 - plastic 2738
 - as an intercrop, pineapple 9198
 - peat 3682
 - nutrition 7683
 - under plastic 2767, 6811
 - in plastic tubes, perlite 7781
 - protected cultivation 2159, 5159
 - straw bales 1142, 4451
 - annual report, Belgium 4363
 - nutrition 5213
 - tunnels
 - plastic 4449
 - annual report, UK 4366
 - USA 5205
- growth
 - internode length, dwarf varieties 1993
 - seed, size, shape, position in fruit 6061
- growth chambers
 - light distribution 7689
 - plant variability 7689
 - temperature distribution 7689
- harvesting
 - mechanical 1204, 5967
 - time of
 - planting, spacing, time 5886

Cucumber and gherkin contd.

- harvesting *contd.*
 - time of *contd.*
 - sowing, dates 5886
- herbicides
 - flower
 - sex
 - chloramben 8647
 - dalapon 8647
 - dinoseb 8647
 - naptalam 8647
 - injury 5209
 - chloramben 626, 628, 2768
 - nitralin 625
 - tolerance, dinoseb 627
 - translocation 6830
- hybrids
 - comparative trials 8645
 - gynœcious 620
- insecticides
 - fungicide mixtures 6820
 - injury, carbamates 2742
 - residues 3328
 - arsenic 3329
- irrigation
 - drip 3624
 - salinity problems 4376
 - sprinkler 3624, 4376
 - damage 3624
 - trickle 4376
 - water, composition 5163
- lead
 - determination 4389
 - residues 4936
- light
 - blue
 - pigment stability 2776
 - responses, varietal differences 8660
 - intensity
 - leaf, optical properties 8659
 - photosynthesis, potassium nutrition 5958
 - pigment stability 2776
 - pigments, degradation 4459
 - responses, varietal differences 8660
 - interaction, ethylene, chlorophyll biosynthesis 2779
 - red
 - pigment stability 2776
 - responses, varietal differences 8660
- manganese, content, plant, soil steaming 8606
- mulching
 - annual report, Western Samoa 7602
 - plastic 4449
- mutants 1196
 - chlorophyll content 8656
 - male sterile 1991
 - nitrite, toxicity 5893
 - nitrogen, metabolism, tissue culture 632
- nucleic acids
 - biosynthesis, diseased leaves 8662
 - metabolism, growth substances 151
 - phosphates, metabolism, humic acid 684
 - photoperiodism, ethylene, production 3688
- photosynthesis
 - inhibition, frost, injury 2003
 - light intensity, potassium nutrition 5958
 - measurement, methods, tissue culture 4457
- pigments
 - degradation
 - chilling 4459
 - light, intensity 4459
 - oxygen concentration 4459
 - stability
 - light
 - coloured 2776
 - intensity 2776
- planting
 - date 1204
 - spacing 1204
 - time 5204
- pollen
 - germination
 - calcium nutrition, fluorine toxicity 6932
 - fluorine toxicity, calcium nutrition 6932
- pollination, nucleic acids, biosynthesis 3693

Cucumber and gherkin contd.

- polyploids 8643
- processing, brining, fruit quality 8668
- proteins
 - determination, electrophoresis 4384
 - metabolism, growth substances 151
- pruning and training 1188
 - methods compared 3681
 - tipping 8649
- report, USA 1940
- respiration, humic acid 684
- seedling
 - growth, *Pseudomonas* spp. 5212
 - transport, containers, plastic 4375
- soiless culture
 - media, re-use 6924
 - nutrient solution, concentration 5215
- spraying, aerial 1195
- storage 5205, 5970
 - cold, salt treatment 2782
- temperature
 - flower, sex 6832
 - growth
 - under glass 2767
 - under plastic 2767
- tissue culture
 - leaf
 - photosynthesis, measurement 4457
 - pigments, degradation 4459
 - ovary 3693
 - transpiration, toxins, fusicoccin 4478
 - transport, containers, refrigerated 7426
 - as virus indicator plants 3473
 - vitamins, content 3339
 - water relations, wind 5959
 - weed control 623, 625–626, 628, 1996, 2768, 5209, 6778, 7680, 8647
 - methods compared 5211
 - wind, water relations 5959
- Cucumber and gherkin diseases 3319**
 - Alternaria cucumerina*, aerial spraying 1195
 - Ascochyta melonis*, resistance 621
 - bacterial, unidentified, control 6822
 - bacterial wilt, resistance 1182
 - Corynespora melonis*, infected leaves, tissue culture 2004
 - cucumber mosaic virus 158
 - Erwinia tracheiphila*, varietal resistance 5218
 - Erysiphe cichoracearum* 5206, 5225, 6819
 - control 6820
 - host nucleic acids, biosynthesis 8662
 - varietal resistance 5945
 - Fusarium* spp., resistance 621
 - mosaic
 - control, cultural methods 3682
 - varietal tolerance 4444
 - Oidium* spp. 160
 - Olpidium brassicae*, vectors, tobacco necrosis 8651
 - pea mild mosaic 4502
 - Phomopsis sclerotoides* 1191, 8655
 - annual report, Canada 3603
 - soil temperature 8655
 - Pseudomonas lachrymans*, aerial spraying 1195
 - Pseudoperonospora cubensis* 2000, 5206
 - varietal resistance 5945
 - Pythium* spp., resistance 621
 - Rhizoctonia* spp., resistance 621
 - soil-borne 3319
 - Sphaerotheca fuliginea* 160, 3319, 3685, 5954
 - control 6822, 7388, 8482
 - seed treatment 5955
 - varietal resistance 1183, 7673
 - systemic necrosis, vectors, *Olpidium brassicae* 4453
 - tobacco necrosis 8651
 - virus
 - annual report
 - German Federal Republic 7597
 - Netherlands 6772
 - watermelon mosaic, detection, aerial photography, annual report, USA 600
- Cucumber and gherkin flower**
 - bud, ethylene, production 3688
- sex
 - growth substances 4463, 5227, 6829
 - endogenous 1198

Cucumber and gherkin flower *contd.*sex *contd.*growth substances *contd.*

ethephon 634, 5231, 5967

herbicides 8647

seed treatment, irradiation 5949

temperature 6832

Cucumber and gherkin fruit

anatomy 4464

firmness, measurement 8669

nutrients, content, growing, under glass

4565

parthenocarpic 620

parthenocarp

growth substances 4463

DPX 1840 5968

quality, processing 8668

set

growth substances 6829

chlorflurenol 5967

ethephon 5228

parthenocarpic 635

pruning and training 6829

storage life, wax coatings 5970

wax coatings 5205, 5970

Cucumber and gherkin growth substances

chlorophyll, metabolism 151

chloroplast

chlorophyll content 2005

number 2005

endogenous

determination 6827

GA 4460

humic acid 684

plant 154, 1198

flower, sex 5227

seed 1197-1198

shoot tip 6828

enzyme activity, ethephon 2777

flower

sex

abscisic acid 5227

CCDP 4463

ethephon 634, 5231, 5967, 6829

fruit

parthenocarp

DPX 1840 5968

morphactins 4463

TIBA 635, 4463

set

chlorflurenol 5967

ethephon 5228, 6829

injury, DPX 1840 5968

interaction

applied, ethephon, and endogenous

5227

tannins

GA 2825

IAA 2825

nucleic acids, metabolism 151

proteins, metabolism 151

seed, development, ethephon 5969

shoot, growth, ethephon 5228

Cucumber and gherkin leaf

ferredoxins, isolation 3689

light

absorption

dark treatment 8659

light intensity 8659

reflection

dark treatment 8659

light intensity 8659

transmission

dark treatment 8659

light intensity 8659

nutrients, content, growing, under glass

4565

Cucumber and gherkin nutrition

annual report, New Zealand 5152

boron

deficiency 7683

leaf analysis 7683

toxicity 7683

calcium, absorption, annual report,

German Federal Republic 7599

copper

deficiency 7683

leaf analysis 7683

toxicity 7683

fertilizers, liquid 5950

FYM 4451

general, leaf analysis, symposium 2489

humic acid 684

Cucumber and gherkin nutrition *contd.*

iron

deficiency 7683

leaf analysis 7683

toxicity 7683

magnesium

enzymes, biosynthesis 5963

toxicity 1997

manganese

deficiency 7683

enzymes, biosynthesis 5963

leaf analysis 7683

toxicity 7683

minor elements, toxicity 157

molybdenum

deficiency 7683

leaf analysis 7683

toxicity 7683

nitrogen 1204, 5215, 6826

application, methods compared 5950

availability 117

flower, sex 166

nitrate accumulation 2870

sources, compared 2870

toxicity 2870

NPK 1143, 4451

peat extracts, plant, composition 5344

phosphorus

availability 120

calcium content 6826

potassium content 6826

soil temperature 6826

sources 3802

potassium 5215

application, methods compared 5950

photosynthesis 5958

zinc

deficiency 7683

leaf analysis 7683

toxicity 7683

Cucumber and gherkin pests*Acalymma vittata*

host preference 2772

varietal resistance 1182

annual report, Cyprus 3604

aphids 4383

biological control 5956

Aphis gossypii

biological control 3685, 5956

control 5222

Bemisia tabaci, control 5222*Diabrotica balteata*, varietal resistance

1182

D. undecimpunctata, host preference

2772

D. undecimpunctata howardi, varietal

resistance 1182

Diaphania nitidalis, host preference 2772*Ditylenchus dipsaci* 3878*Hylemya platura*, control 5928

integrated control 3627, 5217

Macrosiphum euphorbiae, biological

control 3685

Meloidogyne incognita 5351*M. spp.*, soil fumigation 8783*Oligonychus coffeae*, control 5222*Syrphus spp.*, control 5222*Tetranychus spp.*, control 5222*T. telarius*

biological control 3685

integrated control 7802

predators, *Phytoseiulus persimilis*

1193, 7687

Thrips spp., biological control 5051*T. tabaci*

biological control 3685

control 5222

Trialeurodes vaporariorum

biological control 3685

integrated control 7802

Tyrophagus longior, biological control

3685

Cucumber and gherkin plant, sex, ethylene,

production 3688

Cucumber and gherkin root

composition, magnesium nutrition 1997

exudate, composition 189

systems 4450

Cucumber and gherkin rootstocks, -scion

relationships, incompatibility 155

Cucumber and gherkin seed

composition, growth substances 1197

Cucumber and gherkin seed *contd.*

development, growth substances, ethephon

5969

exudate, composition 189

germination

irrigation 4376

sowing, orientation 6061

mixtures, for mechanical harvesting 1200

production, growth substances, ethephon

5231

sowing

dates 5886

direct 1943

peat 7606

treatment

electromagnetic fields, injury 5226

fast neutrons, flower sex 5949

fungicides 5955

gamma rays 154

flower sex 5949

hypertonic salt solution, wafering 6061

pelleted 1943

X-rays 154

Cucumber and gherkin soil

amendments

polystyrene, nutrient availability 117

urea formaldehyde foam resins, nutrient

availability 117

fumigation

Meloidogyne spp., carbathion 8783*Olpidium brassicae*, methyl bromide

8651

Phomopsis sclerotoides

chloropicrin 1191

methyl bromide 1191

nutrients, availability 5160

sterilization, steam, disease control 8651

temperature

disease incidence, *Phomopsis**sclerotoides* 8655

plant nutrition 6826

Cucumber and gherkin varieties 4371, 4451

annual report

Irish Republic 1939

UK 5149

USA 3618

comparative trials 5945

Hungary 7674

USA 5204

disease resistance 1183

Erwinia tracheiphila 5218*Erysiphe cichoracearum* 5945*Pseudoperonospora cubensis* 5945*Sphaerotheca fuliginea* 5954, 7673

drought resistance 4450

early harvesting 6811

gherkin, annual report, Austria 114

heat resistance 4440

herbicides, tolerance 627, 8647

Keeskeméti Hamvas 5947

light responses 8660

processing

brining 8668

canning 5206

Sweden 115

USA 5205

virus tolerance, cucumber mosaic 4444

Cucumis melo var. flexuosus

pests

Aphis gossypii, control 5222*Bemisia tabaci*, control 5222*Oligonychus coffeae*, control 5222*Syrphus spp.*, control 5222*Tetranychus spp.*, control 5222*Thrips tabaci*, control 5222**Cucurbita spp.**

carbohydrates

biosynthesis 5961

translocation 5961

leaf

development

carbohydrates, biosynthesis 5961

photosynthates, translocation 5961

photosynthates, translocation 5961

Cucurbitacins, determination, begonia,

annual report, Belgium 8835

Cucurbits

annual report

Cyprus 3604

Israel 3608

breeding and selection 1941

cucurbitacins, pest resistance 1182

Cucurbits *contd.*

- diseases
 - bean yellow mosaic, resistance 7684
 - melon mosaic, vectors, aphids 6818
 - Phomopsis sclerotoides* 1192
 - resistance, breeding and selection 3316
 - virus, spread 7599
 - watermelon mosaic virus, alternative host, *Momordica charantia* 5951
- flowering, autotetraploids 5966
- mulching, plastic 4378
- pollination 3692
- bees 3692
- rootstocks, disease resistance, *Phomopsis sclerotoides* 1192
- soil, cultivation 4378
- soilless culture, annual report, France 3605
- weed control 1946, 6812, 8588

Cumin

- bibliography 8974
- essential oil
 - composition, varietal differences 1406
 - content, varietal differences 1406

Cumin diseases

- Fusarium oxysporum*, f. *cumini* 3937
- Pseudomonas cumini* 1406

Cumin nutrition

- nitrogen 3938
- NPK 6250
- phosphorus 3938

Cumin seed, treatment, fungicides 3937**Cumin varieties, comparative trials** 1406***Cupressocyparis* spp., growing, peat, nutrition, nitrogen** 8941***Cupressus* spp.**

- dormancy, phosphorus, absorption 3909
- phosphorus, absorption, dormancy 3909

***Curcuma* spp.**

- fungicidal properties 9033
- as medicinal plants 9033

***C. zedoeria*, essential oil, fungicidal properties** 6256**Currents**

- annual report
 - Australia 4296
 - German Federal Republic 5072
 - Netherlands 100
- diseases, virus, review 103
- economics, orchard depreciation 3352
- growing, mechanical harvesting, review 7502
- harvesting, mechanical, review 7502
- herbicides, residues, soil, chlorthiamid, dichlobenil 6542
- varieties
 - USA 3358
 - winter hardiness 3358
- weed control 6542

Curvularia andropogonis*, *Cymbopogon* spp., diseases** 1417C. senegalensis*, sugar cane diseases** 4097***C. spp.***

- corm treatment, gladiolus diseases 2241
- epiphyte, pecan 2653

C. trifolii

- incidence, gladiolus diseases 5423
- Vetiveria* spp., diseases 336

C. tuberculata*, orange diseases** 7143C. uncinata*, *Canna* spp., diseases** 4639**Cuticle**

- growth substances
 - absorption
 - fruit, tomato 2885
 - leaf, fruit trees and plants 2885
 - nitrogen, absorption, leaf, apricot 2612
 - properties, berry, disease resistance, coffee 7193
- structure
 - fruit
 - cherry 2618
 - orange 5571
 - leaf, orange 5571
- studies
 - citrus, annual report, USA 2375
 - techniques 6
 - vegetables, annual report, UK 1938

Cuttings

- adventitious buds, coffee 6403
- bud, removal, dahlia 8888
- callusing
 - root, development, grapevine 2713
 - shoot, development, grapevine 2713

Cuttings *contd.*

- containers, compared, ornamental plants 3918
- frames, trees and shrubs 6134
- grading, chrysanthemum, annual report, UK 4605
- under hessian, tea 8263
- leaf
 - begonia 8884
 - Echeveria elegans* 7932
 - translocation, growth substances, heteroauxin 1320
- treatment
 - growth substances
 - cytokinins, begonia 2223
 - GA, begonia 2223
 - IAA, begonia 2223
 - NAA, begonia 2223
 - sugars, begonia 2223
- leaf removal
 - apple 3381
 - tea 7266
- light
 - flowering date, chrysanthemum 3842
 - tea, annual report, Malawi 6455
- Malus* spp., ornamental, propagation, annual report, Canada 8836
- media
 - annual report, Netherlands 1314, 4604
 - azalea 3917, 8845
 - Baystat, trees and shrubs, annual report, German Federal Republic 7844
 - Chamaecyparis* spp. 6213
 - comparative trials, ornamental trees and shrubs 3838
 - compared, ornamental plants 3918
 - mango 3220
 - ornamental shrubs 708
 - plum 3508
 - saintpaulia 8844
 - sawdust, grapevine 1091
 - tea 2480, 4895
 - trees and shrubs 8844-8845
 - viburnum 2312
 - woody ornamentals, annual report, USA 6129
- meristem, nutrition, carnation 717
- mist
 - apple 2544
 - equipment, trees and shrubs 4684
 - review 2166
- Nisula roll technique, ornamental plants 2166
- nutrition
 - aluminium, toxicity, grapevine 576
 - boron, grapevine 5123
- photoperiodism
 - begonia 2223
 - shrubs 1401
- planting
 - sites compared, ornamental plants 2167-2168
 - spacing, *Chamaecyparis* spp. 6213
- under plastic
 - apple 2544
 - azalea 3917
 - tea 8263
- polarity, apple 2543
- root
 - liquorice 779
 - nematode control, *Albizia* spp. 751
 - ornamental plants 4613
 - Prunus* spp. 5797
 - treatment, growth substances, IBA, tree fruits 8323
- root development, anatomical studies, rhododendron, annual report, Netherlands 4604
- rooting
 - inhibition
 - copper, *Kalanchoe* spp. 8929
 - tap water, *Kalanchoe* spp. 8929
- rooting capacity
 - growth substances
 - endogenous
 - apple 926
 - conifers 3910
 - dahlia 8889
 - lavender 2323
 - trees and shrubs 1328

Cuttings *contd.*

- shoot
 - age
 - azalea 3917
 - Podocarpus* spp. 2982
 - tree fruits 4178
 - carbohydrates content, grapevine 6719
 - nitrogen content, grapevine 6719
 - part
 - grapevine propagation 1089
 - tree fruits 4178
 - pinching, azalea 3917
 - position on source plant, gooseberry 6679
 - size, tea 7266
- size, dahlia 8888
- soil
 - amendments, plastic foam 8850
 - temperature, tea 8263
- soilless culture, hop 5504
- source
 - suckers of trees on own roots
 - cherry 1807
 - plum 1807
- source plants
 - age, *Kalmia latifolia* 7057
- defoliation
 - root formation, grapevine 1090
 - shoot formation, grapevine 1090
- light intensity, dahlia 8890
- nutrition
 - azalea 6221
 - begonia 8884
 - nitrogen, tomato 2130
 - photoperiodism, azalea 6221
 - protein content, tomato 2130
 - ringing, mango 3219
 - side shoot removal, root formation, shoot formation, grapevine 1090
 - temperature, azalea 6221
- treatment
 - growth substances
 - cherry 1809
 - IBA, mango 3219
 - peach 1809
 - poinsettia 2284
 - ornamental plants 2166
- storage
 - azalea 6221
 - controlled atmosphere, ornamental plants 2166
 - grapevine 561, 1900
 - under plastic, grapevine 1087
 - Populus* spp. 3009
 - temperature, ornamental plants 2166
- temperature
 - begonia 2223
 - geranium 8867
 - ornamental plants 2166
 - poinsettia 8867
- treatment
 - boron, grapevine 5123
 - ethylene, *Sedum* spp. 5456
 - etiolation, apple 7338
 - fumigants, methyl bromide, rhododendron 747
- fungicides
 - benomyl, *Scindapsus* spp., 6204
 - captan, peach rootstock 1817
 - Dexon, *Scindapsus* spp., 6204
 - streptomycin, *Scindapsus* spp., 6204
 - sugar cane, annual report, South Africa 7230
 - Terrazole, *Scindapsus* spp., 6204
 - thiram
 - blueberry 1866
 - peach rootstock 1817
- gamma rays, chrysanthemum 6970
- growth substances 869, 2166
- aminozide, poinsettia 2281
- auxins, tea 3264
- BA
 - poinsettia 2281
 - Sedum* spp. 5456
- bean (*Phaseolus*) 6853, 8678
- bougainvillea 8942
- chloromequat, poinsettia 2281
- Chloromone, magnolia 5466
- chlorophenoxyacetic acid, *Sedum* spp. 5456
- chrysanthemum 6971
- Cutstart, azalea 3917

Cuttings contd.treatment *contd.*growth substances *contd.*

2,4-D, magnolia 5466

ethephon

chrysanthemum 4623

Sedum spp. 5456

ethyl hydrogen propyl phosphate,

Sedum spp. 5456

F529, poinsettia 2281

GA

apple 2543

Ipomoea spp. 2930

morning glory 4632

heteroauxin 1320

Hormodin, viburnum 2312

Hormodin no.3, azalea 3917

IAA 1011, 1408, 1900

bean (*Phaseolus*) 3721

bougainvillea 2980

cherry 4513

conifers 3910

grapevine 1091, 1899

hop 5504

olive 9110

plants from irradiated seeds, bean

(*Phaseolus*) 3711

IBA 1408

apple 2543-2544, 7338

azalea 3917

blueberry 1866

bougainvillea 2980

cherry 1809

chrysanthemum 4623

conifers 5462

cornus 4718

grapevine 2713

magnolia 5466

mahaleb 8323

Malus spp. 3931

morning glory 4632

myrobalan 1850

oleander 7959

olive 2314, 9110

orange 3986

peach 1809, 3467

peach rootstocks 1817

plum 1850, 5061

poinsettia 2281

pomegranate 8323

Populus spp. 3009*Prunus mahaleb* 6616*P.* spp. 3509

tree fruits 4178

trees and shrubs 1011

Ziziphus jujuba 3293

Jiffy-Grow, viburnum 2312

malformin, bean (*Phaseolus*) 3721

2-methyl-5-oxybenzofuran-3-carbonic

acid, peach 3467

NAA

blueberry 1866

bougainvillea 2980

cherry 4513

cola, annual report, Nigeria 4035

conifers 5462

cornus 4718

olive 9110

peach rootstocks 1817

pepper, black 1408

Sedum spp. 5456

NAAM, blueberry 1866

ornamental plants 7886

plum 3508

Rootone, viburnum 2312

SADH, ornamental plants 713

TIBA, cola, annual report, Nigeria

4035

trees and shrubs, annual report,

Netherlands 4604

nutrients, boron, blueberry 1866

paraffin, grapevine 7555

stratification, grapevine 1899

sugars, trees and shrubs 1011

vitamins, apple 2544, 7338

wounding

olive 2314

Prunus spp. 3509**Cyamopsis spp.**

economics, USA 6858

taxonomy, cytotoxonomy 6858

Cyamopsis contd.**C. tetragonoloba**

diseases, virus, detection, toluidine blue

metachromasia 2807

growth substances

interaction

chlormequat, GA application 2808

GA, chlormequat application 2808

seed

treatment

6-benzylaminopurine 2808

chlormequat 2808

6-furfurylaminopurine 2808

GA 2808

seedling growth, GA 2808

pests

Asphondylia cyamopsii, varietal

resistance 3727

A. spp. 5269*Cecidomyia texana* 5269

plant variation 204

varieties, pest resistance, *Asphondylia**cyamopsii* 3727**Cyclamen**

annual report

Austria 265

Netherlands 6126

UK 2153

breeding and selection, flowering, date

6171

ethylene, injury 6132

flowering

date 6170

breeding and selection 6171

growing

as an intercrop, *Strelitzia* spp. 8879

peat, nutrition 7893

as pot plants 6170

production 2226, 5390

light 7893

intensity, flower bud, initiation 8887

photoperiodism, flower bud, initiation

8887

planting, spacing 2226

potting composts 2227

types compared 2225, 2938

seedling, production 2226

sulphur dioxide, injury 6132

temperature 4652

responses 5421

Cyclamen diseases, *Fusarium oxysporum*

3866

Cyclamen flower

bud initiation

light 8887

photoperiodism 8887

Cyclamen growth substances, retardants,

Pydanon 2163

Cyclamen nutrition

fertilizers, slow-release 2227, 6964

NPK, peat 7893

potting compost analysis 2938

Cyclamen seed

germination

seed size 6169

temperature 4652

production 2226

sowing, dates 2226

Cyclamen soil, sterilization, steam, disease

control 3866

Cyclamen varieties, miniature 7002**Cycloconium oleaginum**

infection process, olive diseases 1518

olive diseases 3166

Cydia molesta

integrated control, peach pests 514

peach pests 5041

pear pests 1837

quince pests 2662

C. pomonella

aerial spraying, apple pests 7372

apple pests 48, 958, 1744, 1758, 1762,

1767

annual report

Australia 5693

Canada 5694-5695, 8314

German Federal Republic 6506

UK 8318

biological control

apple pests 5739, 8395

annual report, German Federal

Republic 6504

Cydia pomonella contd.

control

apple pests 8396

traps 2529

virus, apple pests, annual report,

Australia 450

forecasting

apple pests 1761

light traps 1764

male traps, apple pests 1766

pear pests 1761

fruit, storage, apple pests 987

fungal parasites, apple pests 1768

host-pest relationships, apple pests 3410

integrated control, apple pests 5739

population studies, apple pests 5739

traps, apple pests 479

varietal resistance, apple pests 8380

Cydonia japonica, diseases, *Phyllosticta**prunicola* 6657**C. oblonga**, diseases, *Phyllosticta prunicola*

6657

Cylindrocarpus destructans, tea diseases

430

C. didum, cacti, diseases 2267**C. spp.**, planting, mechanical, pot plants

5393

Cylindrocladium lanceolatum, control, tea

diseases 9278

C. scoparium

azalea diseases 2287

annual report, Netherlands 6961

control, cacti, diseases, annual report,

USA 8834

Erica spp., diseases, annual report,

German Federal Republic 8837

host nutrition, azalea diseases 6225

magnolia diseases 7039

relative humidity, azalea diseases 6225

temperature, azalea diseases 6225

varietal resistance, azalea diseases 7943

C. tenue, control, tea diseases 9278**Cylindrosporium padi**, cherry diseases 498**Cymbidium**

mycorrhiza, relationships 310

tissue culture, apices 311

Cymbidium spp.

diseases, mosaic, annual report, German

Federal Republic 8837

enzymes, content, leaf 5895

ethylene

production

flower 6209

growth substances 6209

flower

bud development 5460

bud initiation 5460

temperature, annual report,

Netherlands 6126

pigments, biosynthesis 6209

flowering

date 7937

temperature 7937

forcing, chilling requirements 7937

growth substances

endogenous, leaf, translocation 706

ethylene

Actinomycin D 6209

cycloheximide 6209

ethionine 6209

production NAA 6209

interaction, ethionine, NAA application

6209

pigments

biosynthesis

Actinomycin D 6209

cycloheximide 6209

ethionine 6209

NAA 6209

pollination

ethylene, production 6209

pigments, biosynthesis 6209

propagation

protocorm, tissue culture 6205-6206,

8935

shoot, tissue culture 2272

tissue culture

protocorm

growth substances, treatment 6205

media 6206

propagation 8935

Cymbopogon martini

essential oil 3039

- Cymbopogon martini* *contd.*
growing, for essential oil production 3039
- C. spp.**
diseases
 Curvularia andropogonis 1417
 leaf curl 336
essential oil
 nutrition, annual report, Sarawak 3933
 production 1418
 economics 1417
growing, peat 1417
nutrition, NPK 1417
pests
 nematodes 1417
 Oligonychus pratensis 5495
- Cynanchum vincetoxicum*
glycosides 9034
ketones 9034
organic acids 9034
- Cynodon dactylon*
lawns and sports turf, Yugoslavia 7915
as weeds
 control by artichoke, jerusalem 4397
 grapevine 6729
 orange 8066
- C. spp.**
diseases, *Sclerotinia homoeocarpa*, annual report, USA 2152
lawns and sports turf 6193
weed control 8913
as weeds
 bean (*Phaseolus*) 6842
 citrus 3989, 6337–6338
 coffee 4858
 grapevine 1100, 1904, 5841, 6731, 7561
 oil palm 1601
 peach 1016
 sugar cane 6435, 7237, 9237–9238
 tea 9272
- Cynosurus* spp.
lawns and sports turf, variety trials 7021
orchard tracks 3890
- Cyperus rotundus*, as weeds, orange 8066
- C. scariosus*, oil, medicinal properties 1416
- Cyperus** spp.
as weeds
 bean (*Phaseolus*) 3699, 6842
 citrus 3989
 coffee 4858
 annual report, East African community 5617
 grapevine 1904
 melon (cantaloup and musk) 3679
 oil palm 1601
 peach 1016
 rubber 4881, 7226
 sugar cane 405, 8206, 9237–9238
 vegetables 1946–1947
- Cyphomandra betacea*
diseases, Arabis mosaic virus 1528
pests, *Xiphinema diversicaudatum*, vectors, arabis mosaic 1528
- Cypripedium* spp.
flower, development 2977
seedling, raising 742
soil, requirements 1379
tissue culture, meristem, annual report, Italy 6960
- Cyrtopodium* spp., pollen tube, nuclei 1381
- Cytisus* spp.
growing, peat, nutrition, nitrogen 8941
varieties, comparative trials, Netherlands 7050
- Cytospora cincta*, apricot diseases 7423
- C. leucostoma*, apple diseases, annual report, Yugoslavia 3350
- C. spp.**
apricot diseases 8425
host sugars, content, apricot diseases 5757
- Czechoslovakia**
hop, growing 7993
medicinal plants
 economics 7096
 growing 7096
- Dactylaria humicola*, philodendron diseases, annual report, USA 8834
- Dactylis* spp.
roadsides, establishment 3888
weeds, lawns and sports turf 5443
- Dactylum dendroides*, soil steaming, mushroom diseases 6956
- Dactyloctenium* spp., as weeds, sugar cane 6435
- Dacus cucurbitae*
control, *Trichosanthes anguina*, pests 5223
varietal resistance, cucurbits, pests, annual report, India 3607
- D. oleae**
parasites, *Opius concolor*, olive pests 6377
poisoned bait, olive pests 7165
- D. spp.**, protein bait mixtures, olive pests 816
- Dahlia**
annual report, Netherlands 2219
breeding and selection, phyllotaxy 2229
ethylene
 production
 growth substances 4653
 photoperiodism 4653
growing
 for cut flowers 7894
 Netherlands 2228
photoperiodism, tuber, development 4653
phyllotaxy 2229
pinching, flower quality 2231
topping, flower quality 2231
- Dahlia diseases**, *Erwinia carotovora* 3915
- Dahlia flower**
cut, production 2231, 7894
quality, shoot numbers 2231
-shoot relationships 2231
- Dahlia growth substances**
ethylene
 production
 abscisic acid 4653
 aminozide 4653
 ethephon 4653
tuber
 development
 abscisic acid 4653
 aminozide 4653
 ethephon 4653
- Dahlia propagation**
cuttings
 bud, removal 8888
 rooting capacity, growth substances, endogenous 8889
 size 8888
 source plants, light intensity 8890
pot-tuber, production, capillary bench 2230
vegetative, phyllotaxy 2229
- Dahlia tuber**
development
 growth substances 4653
 photoperiodism 4653
 production, Netherlands 2228
- Dahlia varieties**
comparative trials
 annual report, Netherlands 6126
 German Federal Republic 7895
- Damson**
annual report, UK 3347
economics, Switzerland 5059
growing, Switzerland 5059
harvesting, mechanical, shakers 7480
high density planting, Switzerland, statistics 8324
planting
 high density, Switzerland 904
 survey, Switzerland 904
production and trade, Switzerland 5059
- Damson pests**, *Panonychus ulmi*, annual report, German Federal Republic 6506
- Damson propagation** 26
- Damson rootstocks**, -scion relationships 1040
- Damson varieties**
processing, annual report, German Federal Republic 7310
Switzerland 5059
- Dark treatment**
equipment 8309
fruit
 composition, melon (cantaloup and musk) 5962
 flavour, melon (cantaloup and musk) 5962
- Dark treatment** *contd.*
fungus control, plant, bean (*Phaseolus*) 5251
growth studies, seedlings, bean (*Phaseolus*) 5256
leaf, optical properties, cucumber and gherkin 8659
seedling development, melon (cantaloup and musk) 5962
- Darkness**
carbon dioxide fixation
 Kalanchoe spp. 4674
 Sedum spp. 4674
growth studies, bean (*Phaseolus*) 5256
leaf, movements, bean (*Phaseolus*) 5989
nitrogen, content, tomato 5356
nucleic acids, content, tomato 5356
plant, nutrition, tomato 5356
- Darluka filum*, fungal parasites, *Puccinia palargonii-zonalis*, geranium 6982
- Dasyllagon aegeriae*, parasite of, *Ficivora leucoteles*, fig 73
- Dasyneura brassicae*, brassicas, pests, annual report, German Federal Republic 8579
- Dasyneura mali*, apple pests 1763, 2581
- D. tetensi*, black currant pests 7497
- Date**
annual report, Tunisia 3981
enzyme activity
 fruit
 disorder incidence 8108
 ripening 812, 8108
enzymes
 fruit 8108
 treatment, fruit, quality 8108
growing
 Africa, book 9109
 Algeria 1512
 India 6371
 United Arab Republic 6370
insecticides, residues, fruit, malathion 8107
irrigation, trickle v. sprinkler 809
nutritional value 7162
planting, WANE system, roadside plants 3908
pollination, mechanical, methods compared 1515
pruning and training, Iran 810
storage
 pest control
 fumigation
 ethyl formate 813
 hydrogen phosphide 813
temperature, fruit, quality 5581
tissue culture
 embryo, propagation 8106
 shoot-tip, propagation 8106
- Date diseases**
fungus, India, review 7160
 Fusarium oxysporum, f. *albedinis*, book 9109
 F. oxysporum f. *albedinis*, review 1513
- Date disorders**
India, review 7160
sugar wall, enzyme activity 8108
- Date flower**, perianth aestivation 4831
- Date fruit**
composition, nutritional value 7162
-leaf relationships 810
quality
 enzyme activity 8108
 temperature 5581
ripening
 composition, varietal differences 7161
 enzyme activity 8108
- Date leaf**, -fruit relationships 810
- Date pests**
Batrachedra amydraula 1514
 parasites, *Hymenobosomina* spp. 1514
birds 2417
control, India 5583
India, review 5582
nitidulid beetles 8107
 Oligonychus afrasiaticus 2416
 Parlatoria blanchardi, population studies 811
phycitid moths 8107
storage
 fumigation
 ethyl formate 813
 hydrogen phosphide 813

Date propagation

- offshoots 8106
- date, removal from mother plant 8105
- source plants, treatment, growth substances 8106

Date seed

- germination 9125
- germination 2415

Date varieties

- comparative trials, India 8104
- fruit, composition 7161
- India 5584
- United Arab Republic 6370

Datura spp.

- alkaloids 3004, 3970, 6289, 9035
- biosynthesis 3073
- growth substances 8002
- content 1432
- ultra-violet light 6288
- determination 3965
- production, tissue culture 1439
- biosynthesis, tissue culture 2333
- chlorophyll, biosynthesis, growth substances 8002
- coumarins 3970
- diseases
 - pea mild mosaic 4502
 - virus-3B 8017
- growth substances
 - alkaloids, biosynthesis, GA 8002
 - chlorophyll, biosynthesis, GA 8002
- leaf, extracts, virus, inhibition, bean (*Phaseolus*) 642
- light
 - ultra-violet
 - alkaloids, content 6288
 - seed, treatment, alkaloids, content 6288
- lipids 9037
- nutrients, content, determination 6293
- organic acids, biosynthesis 8016
- propagation, cuttings 2168
- seed, treatment, light, ultra-violet, alkaloids, content 6288
- tissue culture 8001
- alkaloids
 - biosynthesis, growth substances 2333
 - production 1439, 3969
- callus
 - alkaloids, biosynthesis 9035
 - growth substances, treatment 9036
 - melanogenesis 1433
 - media 1439

D. stramonium, mycoplasma, indicator plants 278**D. stramonium**, as a rootstock, capsicum, mutation induction 2839**Daucus spp.**, essential oil, composition 763**Deer**

- repellants, varietal preference, hop pests 7095
- repellents
 - cherry pests, annual report, German Federal Republic 7309
 - citrus pests, annual report, USA 2375

Defoliation

- branching, brussels sprouts 8631
- calcium cyanide, fruit trees 6512
- chemical
 - apple 6510-6511
 - annual report, USA 24
 - cherry 6510-6511
 - nursery stock, annual report, UK 3347, 8316
 - peach 6510-6511
 - pear 6510-6511
 - plum 6510-6511
 - potassium iodide, rose 2299
 - rubber 8183
 - trees fruits 5716
- growth substances
 - apple 6511
 - cherry 6511
 - endogenous, grapevine 7586
 - ethephon
 - hazel 5024
 - nursery stock 5024
 - nursery stock 7314
 - peach 6511
 - pear 6511
 - plum 6511
 - magnesium chlorate, fruit trees 6512

Defoliation contd.

- mechanical, carrot, annual report, Netherlands 8581
- potassium iodide, fruit trees 6512
- surfactants, nursery stock 7314
- before weed control, blueberry 8492
- Delasperma spp.**
 - ground cover plants 710
 - herbicides, injury 1323
 - weed control 710
- Delia cilicrura**, bean (*Phaseolus*) pests, annual report, UK 3611
- D. platura**, infestation source, vegetables, pests 8720
- Delonix regia**
 - enzyme activity 1702
 - seed, amino acids 6236
- Delphinium**, alkaloids, content 783
- Delphinium** flower, cut, preservatives, vase life 4611
- Delphinium** root, systems 1345
- Delphinium spp.**
 - alkaloids 6162
 - application to, lettuce, pea 4754
- Delphinium spp.**, plant, composition, ajacine 6995
- Delphinium** varieties, annual report, USA 1441, 6129
- Dendrobium spp.**
 - breeding and selection, report, USA 6130
 - pollination 4682
 - taxonomy, cytotoxonomy 3905
- Dendrophoma obscurans**, strawberry diseases 2702
- Denmark**, horticultural, organizations 3298
- Deraeocoris nebulosus**, predator on, *Panonychus ulmi*, apple 4213
- Desiccants**
 - endothal, blueberry 8492
 - herbicides, diquat, begonia, annual report, Belgium 8835
 - neo-decanoic acid mixture, onion 4526
 - paraquat, sugar cane 4894
- Desmia funeralis**
 - biological control, grapevine pests 1922
 - grapevine pests 1922
- Desmodium spp.**, leaf, wax, composition 3055
- Deuterophoma tracheiphila**
 - citrus diseases 365, 9091
 - fungicides, application, methods compared, lemon diseases 3130
 - host amino acids, content, lemon diseases 8061
 - interaction, virus, orange diseases, annual report, Italy 8050
 - iron, nutrition, lemon diseases 364
 - phytoncides, lemon diseases 3129
 - resistance
 - breeding and selection, lemon diseases 7126, 7144, 9078
 - lemon diseases 8060
 - virus interaction, orange diseases 4802
 - toxins, chlorophyll, biosynthesis, lemon diseases 4801
 - varietal resistance, citrus 3131
- Deutzia growth substances**, retardants, chlormequat 6212
- Diabrotica adelpha**, vectors, rugose mosaic, bean (*Phaseolus*) pests 6845
- D. balteata**
 - varietal resistance, cucumber and gherkin pests 1182
 - vectors, rugose mosaic, bean (*Phaseolus*) pests 6845
- D. spp.**, varietal resistance, melon (cantaloup and musk) pests 2001
- D. undecimpunctata**, host preference, cucumber and gherkin pests 2772
- D. undecimpunctata howardi**, varietal resistance, cucumber and gherkin pests 1182
- Dialeurodes citri**
 - citrus pests 7148
 - fungal parasites, citrus pests 8081
- Dianthus spp.**, pests, *Heterodera trifolii* 3317
- Diaphania hyalinata**, cucumber and gherkin pests, annual report, St. Lucia 8577
- D. nitidalis**, host preference, cucumber and gherkin pests 2772

Diaphorina citri

- alternative hosts, *Citrus* spp., pests 8082
- population studies, *Citrus* spp., pests 8082

Diaporthe citri

- citrus diseases 797, 9093
- annual report, Australia 4782
- irrigation, fungicide application, citrus diseases 3135
- mandarin and tangerine diseases 3128

D. perniciosus, apple diseases 476**Diaprepes abbreviata**, citrus pests, annual report, USA 2375**Diatraea centrella**, Bahamas, sugar cane pests 8238**D. lineolata**, Bahamas, sugar cane pests 8238**D. saccharalis**

- sugar cane pests 2472
- parasites, sugar cane pests 2469
- predators, sugar cane pests 8239
- varietal resistance, sugar cane pests 1617, 2466, 2472, 8193

D. spp.

- aerial spraying, sugar cane pests 8235
- biological control, review, sugar cane pests 1640

D. spp., damage, assessment, sugar cane pests 2471**D. spp.**, Mexico, sugar cane pests 6440**D. spp.**, parasites, sugar cane pests 5654**Dibrachys cavus**, biological control of, *Aegeria myopaeformis* 3409**Dicentra spp.**, propagation, rhizome 4613**Dichondra sativum**, grasses, lawns and sports turf 739**Dictamnus albus**, alkaloids 9038**Didymella applanata**

- raspberry diseases 2687, 7509
- annual report, UK 7489

D. lycopersici, tomato diseases 6083**Dieffenbachia spp.**

- acaricides, injury 7024
- annual report, USA 8834
- diseases, dasheen mosaic 2975
- growing, in pots, annual report, Netherlands 6127
- nutrition
 - major elements, plant, analysis 1376
 - minor elements, plant, analysis 1376
- pests, mites, control 7024
- plant, composition, major and minor elements 1376

Dieliomyces microsporus, biological control, mushroom diseases 7834**Digitalis lanata**, glycosides 9014**D. purpurea**

- glycosides, determination 8020
- mutants 4640
- steroids 8019

D. spp.

- annual report, Austria 347
- diseases, annual report, German Federal Republic 7063
- glucosides 3074
- glycosides 8018
- extraction, methods 5521
- hybrids 6294
- pigments, content 7107
- seed
 - germination
 - cardenolides, content 1448
 - metabolic processes 3075
 - saponins, content 1448
 - seedling, development 1448
- steroids
 - biosynthesis 1435
 - content 2357
 - sterols, metabolism, seed germination 3075

Digitaria sanguinalis

- as weeds
 - container-grown plants, holly 4693
 - gladiolus 6175
 - sisal 7992
 - strawberry 8510
 - tomato 6904

D. spp.

- as weeds
 - artichoke, globe 3633
 - bean (*Phaseolus*) 8683
 - cacao 8134
 - carrot 8809

- Digitaria* spp. contd.**
 as weeds contd.
 cucurbits 623, 6812
 herbs 6777
 lawns and sports turf 8914
 peach 1016
 rubber 9210
 sugar cane 6435, 7237, 9236
 vegetables 680, 6777
- Dill**
 ascorbic acid, carotene, content, leaf 4728
 bibliography 8975
 essential oil, composition 346
 flavonoids 3340
 growing, USSR 4729
 growth chambers
 leaf production 8617
 plant composition 8617
 soilless culture 5487
 weed control 8977
 annual report, German Federal Republic 7064
 economics 2315
- Dill diseases**
 alfalfa mosaic, yield reduction 8976
 celery mosaic, yield reduction 8976
 cucumber mosaic, yield reduction 8976
Fusarium spp., yield reduction 8976
 virus, incidence, German Federal Republic 6781
 virus, unidentified, yield reduction 8976
- Dill plant**, variation, geographical source 8978
- Dill seed**, sorting, air flow 4373
- Dimmockia javanica***, parasite of, *Promecotheca cumingi*, coconut 8143
- Dionysia hissarica***, chromosome numbers 281
- D. involucreta***, chromosome numbers 281
- Dioscorea caucasica***
 tuber
 anatomy 2358
 morphology 2358
- D. spp.**
 alkaloids, biosynthesis 3058
 annual report, India 3971
 diseases
 Botryodiplodia theobromae 6297
 Cladosporium spp. 6297
 Penicillium spp. 6297
 Rhizoctonia spp. 6297
 Rhizopus nodosus 6297
 glycosides 8021
 content, tuber, incubation 6295
 determination 4763-4764
 growing 5522
 USSR 5523
 harvesting 5523
 as medicinal plants, Venezuela 8022
 photoperiodism, plant, composition, saponins 356
 propagation, cuttings 1434, 5523
 saponins 5522
 content 1454
 photoperiodism 356
 saponins
 content 2334
 production, tissue culture 6296
 steroids, metabolism, tissue culture 2342
 taxonomy, saponins, content 1454
 tissue culture, saponins, production, extraction methods 6296
 tuber, incubation, glycosides 6295
- Diospyros blancoi***, synonyms 5593
- Diospyros lotus***, as a rootstock, persimmon 8115
- Diplocarpon earliana***
 strawberry diseases 1073
 varietal resistance, strawberry diseases 3536
- Diplocarpon rosae***
 control, rose diseases 5476, 8305
 resistance, rose diseases 6266
 rose diseases 2995
 annual report, USA 6129
 varietal resistance, rose diseases 5473, 8950
- Diplodia natalensis***
 fruit storage, mango diseases 4873
 mandarin and tangerine diseases 4810
 mango diseases 3242
 orange diseases 4810, 7143
- Diplodia natalensis* contd.**
 storage dips, mango diseases 7205
- D. spp.**
 control
 budding time, rubber diseases 8181
 cultural methods, rubber diseases 8181
 post-harvest dips, orange diseases 6362
 storage dips, lemon diseases 6363
- Diplodina castaneae***, chestnut (*Castanea*) diseases 1006
- Dipsacus* spp.**, growth substances, responses, GA 7117
- Diptacus gigantorhynchus***, plum pests 2658
- Directory**, horticultural, research institutes 7278
- Discosia punicea***, pomegranate diseases 1526
- Disease**, incidence, plant nutrition 865
- Diseases**
 assessment methods 4126
 vegetables 5165
 crop losses, assessment methods 1692
 detection, aerial photography, cucumber and gherkin, annual report, USA 600
 forecasting
 Botrytis spp., hop, annual report, German Federal Republic 7064
 Cercospora apii, celery, annual report, USA 4367
 C. musae, banana 6386
 Mycosphaerella ligulicola, chrysanthemum 1333
 Phytophthora infestans, annual report, German Federal Republic 7597
 Pseudoperonospora humuli, hop 345
 Venturia inaequalis 1751
 host-pathogen relationships
 light, reflection, annual report, USA 599
 organic acids, tulip 3877
 phytoalexins, production, capsicum 1268
 saponins, content, ivy 5464
 mycoplasma, review 7298-7299
 soil borne, nutrition 864
 vegetable growing, peat 7607
- Dissotis plumosa***, ground cover plants, growth retardants 6157
- Distantiella theobroma***
 cacao pests 3182
 annual report, Ghana 7177
 population studies, cacao pests 9143
- Ditylenchus dipsaci***
 tulip pests 2260
 alternative hosts, tulip pests 3878
 bulbs, pests 3864
 hydrangea pests, annual report, UK 6128
 narcissus pests 6186
 annual report, UK 3834
 onion pests 1254, 3317
 annual report
 Irish Republic 1939, 6770
 Netherlands 6772
 UK 3610, 5153
 population suppression, by compositae 283
 tulip pests 6186
 annual report, Netherlands 6961
- D. spp.**, bulbs, pests, annual report, Netherlands 2219
- Dizygomyza cepae***, leek pests 662
- Dizygotheca* spp.**
 plant, morphology 7051
 propagation, cuttings, mist 7051
- Dodder**, mycoplasma, vectors, sandal spike, *Santalum* spp. 6270
- Dormancy**
 amino acids, cabbage 8632
 apple, report, USA 8320
 breaking
 DNOC, apple 4973
 temperature
 fruit trees and plants 907
 gladiolus 291
 lily 2949
 carbohydrates, metabolism, rhubarb 7759
 chlorogenic acid, content, peach 7453
 frost resistance, black currant 6671
 growth substances
 endogenous
 apple 6575
- Dormancy contd.**
 growth substances contd.
 endogenous contd.
 apricot 5758
 coffee 7196
 grapevine 8568
 peach 5758
 leaf removal, fruit trees and plants 6521
 naringenin, content, peach 7453
 peach, report, USA 8320
 phosphorus, absorption, conifers 3909
 varietal differences, onion 6885
 water relations, fruit trees and plants 6521
 winter hardiness, fruit trees and plants 6521
- Dothidella ulei***, clonal resistance, rubber diseases 8181
- Dracaena* spp.**
 diseases, *Fusarium moniliforme* 8924
 growing, media, annual report, Belgium 8835
 propagation, annual report, Belgium 5386
- Dracocephalum renati***, essential oil, content 7983
- Drechslera cactivora***, cacti, diseases 2267
- D. halodes***, marrow diseases 4456
- D. hawaiiensis***, sugar cane diseases 4097
- D. rostrata***, sugar cane diseases 4097
- Drepanopeziza ribis***
 control
 black currant diseases, annual report, German Federal Republic 8481
 red currant diseases, annual report, German Federal Republic 8481
 varietal differences, black currant diseases 4308
 varietal resistance, red currant diseases 4308
- Drosanthemum* spp.**
 ground cover plants 710
 weed control 710
- Drosophila* spp.**, resistance, breeding and selection, tomato pests 5335
- Drought**
 disease incidence, *Peronospora parasitica*, cabbage 8622
 flower, drop, eggplant 1272
 fruit, composition, mandarin and tangerine 8093
 fruit trees and plants 8285
 injury, flower biology, bean (*Phaseolus*) 7722
 leaf
 composition
 sugar cane 2474, 8200
 tomato 2474
 phosphorus, absorption, oil palm 4071
 photosynthesis, temperate tree fruits 908
 plant
 cell numbers, temperate tree fruits 908
 composition, temperate tree fruits 908
 potassium, deficiency, apple 4979
 resistance
 breeding and selection
 coffee, annual report, Nigeria 4035
 tea, annual report, Zambia 8144
 evaluation techniques
 grapevine 6727
 strawberry 8508
 frost resistance, peach 7444
 leaf
 biology, cotoneaster 2999
 composition
 snowdrop 2963
 temperate tree fruits 908
 plant nutrition, apple 4962
 ribosome activity, bean (*Phaseolus*) 2802
 root, systems, cucumber and gherkin 4450
 rootstock-scion relationships, apple 8354
 rootstocks
 apple 5741
 citrus 3988
 soil moisture, apple 4962
 stomata
 number, peach 7444
 size, peach 7444
 trees and shrubs 1382-1383
 respiration, temperate tree fruits 908

Drought contd.

- root, systems, grapevine 6745
- sucrose, content, sugar cane 404

Drying

- fruit 22
- hop 3048
- onions, methods 2835
- vanilla, ovens 2321
- vegetables 22

Dryocosmus kuriphilus, resistance, breeding and selection, chestnut (*Castanea*) pests 8447***Duboisia myoporoides***

- seed
 - germination, temperature 6298
 - treatment, growth substances, GA 6298

***Duranta* spp.**, propagation, cuttings 2167**Durian fruit**, aroma 7171**Dusts**, electrostatic 5674**Dwarfing**, growth substances, ancymidol, *Zantedeschia* spp. 4660**Dye plants**

- capsicum 2092
- Indonesia 1674
- liquorice 3943
- pomegranate 3943
- root, anatomy 3172
- seed, oil, biosynthesis 3336
- walnut 3943
- wild, Crimea 862

Dysaphis devectora, resistance, apple pests 2539***D. plantaginea***

- apple pests, annual report, Netherlands 5698

- population studies, apple pests, annual report, UK 3372

- resistance, apple pests 2539

D. spp., apple pests, annual report, German Federal Republic 6506***Dysmicoccus brevipes***, pineapple pests 1612**Earthworms**, scavenger of, endogenous fungi, apple 1752**East African crops**, book 376***Echeveria elegans***

- leaf, growth 7932
- propagation, cuttings, leaf 7932

E. spp.

- flower, bud initiation, photoperiodism 8925
- photoperiodism, flower bud, initiation 8925

Echinocereus* spp.**, edible fruits 822Echinochloa crus-galli***

- as weeds
 - gladiolus 6175
 - lawns and sports turf 8914

E. spp.

- as weeds
 - artichoke, globe 3633
 - coconut 8141
 - fruit trees and plants 452
 - peach 1016
 - vegetables 7627

Echinodorus brevipedicellatus, diseases, *Aphanomyces* spp. 2974**Economics**

- grapevine nutrition 5851
- orchard depreciation, peach 4250

Edwardsiana rosae, population studies, fruit trees and plants, pests 8326**EEC**

- apple
 - economics 3341
 - production and trade 3341
- legislation, horticultural 5692
- pear, production and trade, economics 3342
- small fruits
 - economics 3343
 - production and trade 3343

Eggplant

- amino acids 8761
- annual report
 - Cyprus 3604
 - India 3607
 - Malawi 8580
 - UK 6774
- arsenic
 - absorption 2851
 - translocation 2851

Eggplant contd.

- breeding and selection
 - disease resistance 1271
 - Myrothecium roridum* 6050
 - F₁ hybrids, annual report, USA 3617
 - report, USA 1940
- carbon dioxide, supplementary from diesel exhaust, injury 3625
- grading, mechanical 4913
- growing
 - under glass, pest control 3627
 - protected cultivation 2159, 5159
 - straw bales 1142
- herbicides, tolerance, dinitroanilines 1267
- insecticides
 - absorption 4546
 - injury 2123
 - residues 3328, 4546
- lead
 - absorption 2851
 - residues 4936
 - translocation 2851
- nitrite, toxicity 5893
- nutrients, content 5890
- photoperiodism, flower bud, initiation 8762
- physiology 869
- planting, spacing 3784
- pollen, viability 4547
- storage
 - cold, salt treatment 2782
 - controlled atmosphere, relative humidity 8763
- dips, disease control, *Colletotrichum* spp. 6051
 - temperature 8763
- temperature, flower bud, initiation 8762
- weed control 6777
- review 6065

Eggplant diseases

- Aspergillus* spp. 1274
- Colletotrichum gloeosporioides*
 - f. *melongenae*
 - post-harvest dips 4548
 - varietal resistance 5329
 - resistance 5328
- C. spp.* 6051
 - alternative hosts, *Solanum torvum* 6051
 - heat treatment 6051
- Fusarium* spp.
 - incidence 6327
 - seed treatment 6899
- little leaf
 - control 8760
 - antibiotics 7767
 - symptoms 7766
- Myrothecium roridum*, varietal resistance 6050
- Penicillium* spp. 1274
- Phomopsis vexans*, varietal resistance 5329
- Pseudomonas solanacearum*
 - rootstock resistance 4545
 - varietal resistance 1271, 5329, 8759
- Pythium* spp. 1274
- Rhizoctonia solani* 1274
- Rhizopus nigricans* 1274
- soil-borne 3319
- Verticillium* spp.
 - annual report, Canada 2734
 - seed treatment 6899

Eggplant flower

- bud initiation
 - cotyledon removal 8762
 - photoperiodism 8762
 - temperature 8762
- composition 1276
- development 1276
- drop 1276
- drought 1272
- morphology 4547

Eggplant fruit

- ripening, seed treatment, ionizing irradiation 2852
- set, growth substances 3786
- size
 - planting, spacing 3784
 - seed treatment, ionizing irradiation 2852

Eggplant growth substances

- fruit
 - set
 - 4-CPA 3786
 - Duraset 3786
 - 2,4-D 3786
 - injury, 2,4-D 3786
 - leaf
 - senescence
 - GA 671
 - kinetin 671
 - seed
 - treatment
 - GA 3783
 - IAA 3783
 - NAA 3783

Eggplant leaf

- senescence
 - ascorbic acid, treatment 671
 - growth substances
 - GA 671
 - kinetin 671

Eggplant nutrition 869

- calcium, requirements 4381
- FYM 6898
- major elements, plant analysis 4381
- magnesium, requirements 4381
- minor elements, plant analysis 4381
- nitrogen
 - application
 - foliar 238
 - time 6898
 - requirements 4381
 - NPK 1273, 3785, 6898
 - phosphorus, application, time 6898

Eggplant pests

- annual report, Sarawak 3609
- aphids 4383
- Epilachna vigintioctopunctata* 670
- Hemitarsonemus latus* 4539
- integrated control 3627
- Radopholus similis*, alternative hosts 7608
- Tetranychus cucurbitae* 1275
- Tetranychus telarius* 4383, 4539
- control 7768

Eggplant, plant, composition, plant nutrition 6898**Eggplant rootstocks**

- comparative trials, French West Indies 4545
- disease resistance, *Pseudomonas solanacearum* 4545
- own-rooted plants compared 5329
- Solanum* spp. 4545
- Solanum torvum* 4545, 5329
- tomato rootstock CRA 66 4545

Eggplant seed

- treatment
 - growth substances
 - GA 3783
 - IAA 3783
 - NAA 3783
 - hydroquinone, methylene blue, paranitrophenol, orthonitrophenol 6899
 - ionizing irradiation
 - fruit
 - ripening 2852
 - size 2852

Eggplant varieties 3781, 4371

- annual report
 - Israel 3608
 - USA 3618
 - Ceylan SM 164 4545
- comparative trials 5329
- Pakistan 5330
- disease resistance 5329
 - Colletotrichum gloeosporioides*, f. *melongenae* 5329
 - Pseudomonas solanacearum* 8759
- Pakistan 1277
- Phomopsis vexans* 5329
- Pseudomonas solanacearum* 5329
- Pusa Kranti 3782
- report, Sri Lanka 2733
- USSR 1272
- Waimanalo Long 5331
- Elaeagnus angustifolia***, diseases, *Phomopsis* spp. 4719
- E. spp.***
 - growing, peat, nutrition, nitrogen 8941
 - nutrition, nitrogen, container grown 267

- Elaeis* spp.**, types, descriptions 1598
Eldana saccharina
 control, cultural methods, sugar cane
 pests 8240
 East Africa, survey, sugar cane pests
 8220
Elder, growing, Austria 4295
Elder diseases, virus, annual report, Canada
 2669
Elder growth substances, retardants,
 chlormequat 6212
Elder varieties
 Donau 4295
 Haschberg 4295
Electric current
 growth, stimulation, tomato 688
 plant, weight, tomato 688
Electrical activity
Ipomoea spp 3847
 pea 3847
 root, pumpkin 5224
 shoot, pumpkin 5224
Xanthium spp. 3847
Electrical conductivity, measurement,
 equipment 7286
Electrical potential
 cold resistance, cucumber and gherkin
 4458
 measurement, pumpkin 3687
 pollination
 brussels sprouts 1175
 cabbage 1175
Electrical resistance, disease incidence,
 proliferation, apple 7376
Electromagnetic field treatment, strawberry
 7541
Elephantopus scaber, glycosides 3076
Eleusine indica
 as weeds
 lawns and sports turf 8914
 sisal 7992
E. spp.
 as weeds
 coconut 8141
 oil palm 8166
 rubber 4881, 7226, 9208, 9210
 sugar cane 7235
 tea 9272
Eleutherococcus senticosus, composition
 3961
***Elliottia* spp.**, growing 7040
Elsinœ ampelina, control, grapevine diseases
 8559
Elsinoë ampelina, pruning and training,
 grapevine diseases 569
E. fawcetti, citrus diseases 797
E. piperis
 alternative host, *Piper guineense*, pepper,
 black, diseases 6254
 pepper, black, diseases 6254
E. veneta *Didymella applanata*, raspberry
 diseases, annual report, Irish Republic
 1857
***Emilia* spp.**, as weeds, sugar cane 9236
Empoasca flavescens, grapevine pests 3587
E. kraemeri, bean (*Phaseolus*) pests, annual
 report, USA 4367
Encarsia formosa
 parasite of
Trialeurodes spp., tomato, annual
 report, Canada 2734
T. vaporariorum, vegetables 7802
E. spp., parasite of, *Trialeurodes* spp.,
 tomato, report, UK 5885
E. tricolor 2703
Endive
 air pollution, injury, exhaust gases 865
 annual report
 Netherlands 1132, 8581
 USA 8585
 breeding and selection
 annual report
 Italy 6771
 USA 4368
 enzyme activity 4396
 herbicides, injury, dacthal 8605
 seedling raising, pots, types compared
 5390
 species, classification 4401
 weed control 5680, 8605
Endive diseases
 bidens mottle 5912
 lettuce mosaic 5912
Enhydra fluctuans
 glycosides 4765
 growth substances, endogenous 3011
E. spp., plant, composition, lactones 349
Enicostemma litorale
 alkaloids 3077
 essential oil 3077
 sterols 3077
Enterobacter aerogenes
 antagonistic to, *Pseudomonas tolaasi*,
 mushroom 3828
 antagonistic to, *Pseudomonas tolaasii*,
 mushroom 2905
Entomophthora aphidis, fungal parasite,
 aphids, peach 1022
E. planchoniana, fungal parasite, aphids,
 peach 1022
E. spp., fungal parasite, *Mythimna phaea*,
 sugar cane 8234
Entomosporium maculatum
 pear diseases 8478
 quince diseases 8478
Entyloma boraginis, control, borage diseases,
 annual report, German Federal Republic
 7964
Enzyme activity
 amino acids
 biosynthesis, soil salinity, pea 2815
 pea 7732
 bark
 nitrogen nutrition, apple 7398
 seasonal variations, apple 7398
 bean, fermentation, cacao 4048
 bud, flower bud initiation, olive 9112
 bulb
 dormancy, onion 6885
 flavonols, biosynthesis, onion 2834
 calcium nutrition, vegetables, annual
 report, UK 8584
 cane
 growth, sugar cane 2475
 ripening, sugar cane 2475, 6449
 carbon dioxide concentration, grapefruit
 1505
 cations, tea 4903
 chloroplast, pea 8725
 corm, dormancy, gladiolus 4655
 cormel, dormancy, gladiolus 4655
 cotyledons, tissue culture, cucumber and
 gherkin 163
 determination
 gladiolus 4655
 leaf 1063
 root 1063
 disease resistance, *Alternaria kikuchiana*,
 pear 7458
 diseased plants
 apple 8402
 bean (*Phaseolus*) 3708
 carrot: 2897
Fusarium oxysporum, f. *lycopersici*,
 tomato 7796
 melon (cantaloup and musk) 5220
 papaw 3246
Poa pratensis 740
Pythium spp., vegetables 8791
 tomato 1296, 3788, 6084–6085
 yellow vein mosaic, okra 6887
 endive 4396
 fertilizers, algae, tomato 6098
 flower
 ornamental plants 3851
 temperature, lily 2250
 tulip 7911
 flower abscission layer 5991
 flower bud, carbohydrates, metabolism,
 peach 3479
 frost resistance
 grapevine 5138
 plum 7477
Prunus spp. 7477
 fruit
 browning
 banana 1545
 peach 5044
 development
 apple 4993
 tomato 5664
 disorder incidence, date 8108, 8108
 disorders
 internal browning, apple 7412
 peach 5044
 gooseberry 2683
Enzyme activity contd.
 fruit contd.
 grapevine 1118
 growth substances, GA, grapevine
 1122
 organic acids, metabolism, tissue
 culture, tomato 1298
 papaw 8170
 peach, damage causes browning 82
 proteins, biosynthesis, fig 1008
 ripening 88, 7306
 avocado 358
 banana 7176
 capsicum 2100
 citron 8096
 date 812, 8108
 papaw 3247–3248
 pear 1031, 8472
 tomato 5362, 5366, 5664, 8793
 senescence, peach 5044
 soil salinity
Luffa cylindrica 2838
 okra 2838
 storage
 apple 6592, 7412
 capsicum 4543
 pear 4284
 temperature, capsicum 4543
 tomato 256
 fruit abscission layer
 cherry 7431
 citrus 2405, 3146
 growth substances, orange 8085
 fungicides, copper, tea, annual report,
 Malawi 6455
 grafted plants, apple 8402
 growth substances
 cytokinins, fenugreek 3977
 ethephon, cucumber and gherkin 2777
 IAA, pea 6010
 impatiens 7884
 kinetin, pea 6010
 pea 2067, 2820, 7736–7737
 tomato 5361, 8799
 humic acid
 cucumber and gherkin 684
 tomato 684
 inhibition
 amino acids, pea 217
 artichoke, jerusalem 1305
 bean (*Vicia*) 648
 carrot 1305
 diseased plants, apricot 1805
 fungicides
 apple 6578
 apricot 4952
 growth substances, cress 8986
 pea 5286, 8724
 prenyl pyrophosphates
 bean (*Phaseolus*) 2030
 melon (cantaloup and musk) 2030
 rubber 2030
Pseudomonas phaseolicola, bean
 (*Phaseolus*) diseases 177
 root extracts, bean (*Vicia*) 2033
 strophanthin, pumpkin 2778
 inhibitors, determination, bean (*Phaseolus*)
 7723
 interaction, growth substances, 2,4-D, rose
 1395
 iron, deficiency, tomato 7789
 leaf
 achlorophyllous, bean (*Phaseolus*)
 4480
 bean (*Phaseolus*) 6850
 cacao, annual report, Trinidad and
 Tobago 9136
 coloured light
 bean (*Vicia*) 8712
 disease incidence, celery 8816
 orange 7149
 development
 tea 5664
 tomato 5362
 diseased plants, peach 5771
 flower bud initiation, olive 9112
 fungicides, bordeaux mixture, apricot
 4952
 growth substances, tomato 6102
 light
 spinach 4396
 sugar cane 8251

Enzyme activity contd.

- leaf contd.
 light intensity
 disease incidence, celery 8816
 disease resistance, tomato 4575
 peach 3491
 pear 3491
 manganese deficiency, sugar cane 1632
 manganese nutrition, grapevine 1111
 nitrogen nutrition, apple 7398
 pea 8723
 petiole glands, impatiens 4642
 phenolic compounds metabolism, pear 6645
 photosynthesis, capsicum 6044
 plant nutrient status, grapevine 5138
 seasonal variations, apple 7398
 senescence, tea 5664
 soil salinity
 Luffa cylindrica 2838
 okra 2838
 spinach, plant sex affects 129
 squash 7691
 sugars, content, sugar cane 1632
 tea 4904
 temperature, grapevine 5138
 trace elements, spinach 2747
 water relations, grapevine 5138
 leaf abscission layer
 bean (*Phaseolus*) 2035
 coleus 5991
 light 1673
 far red, mustard 7980
 fenugreek 3977
 pea 7733
 red, mustard 7980
 watermelon 7690
 molybdenum nutrition, grapevine 1112
 nitrogen, metabolism, capsicum 8754
 nut, milk, plant nutrient status, coconut 4853
 nutrients, deficiency diagnosis, vegetables 1145
 organic acids, metabolism, mushroom 7839
 pH, grapevine 1119
 photoperiodism
 impatiens 7884
 organic acids metabolism, *Kalanchoe* spp. 8926
 photosynthesis, sugar cane 8248
 phytoalexins, production, tulip 736
 plant
 carbohydrates, metabolism, banana 9134
 copper, toxicity, lettuce 2754
 ethylene 1703
 herbicides
 tea 8265
 tomato 6926
 mustard 6009
 pea 6009
 senescence, apple 8402
 soil salinity, tomato 6926
 sugar cane 8252
 pollen germination
 eschscholtzia 2213
 Haemanthus albiflos 8910
 propagation methods, grapevine 1092
 proteins
 biosynthesis
 bean (*Phaseolus*) 4479
 pumpkin 161
 respiration
 kohl-rabi 6799
 plum 7477
 turnip 148-149
 review, RNA synthetases 1701
 root
 aluminium toxicity, pea 8721
 bean (*Vicia*) 5266, 5999
 boron toxicity, sugar cane 8217
 ethylene production, sugar cane 4103
 ethylene treatment, carrot 2141
 growth substances, amino acids, pea 4509
 histological studies, pea 5282
 magnesium toxicity, cucumber and gherkin 1997
 nitrogen nutrition, apple 7398
 onion 3768
 pea 7734
 seasonal variations, apple 7398

Enzyme activity contd.

- root contd.
 soil salinity, pea 8722
 tomato 8792
 root extracts
 bean (*Phaseolus*) 2033
 bean (*Vicia*) 2033
 pea 2033
 root nodule, pea 1229
 root nodule bacteria, pea 1229
 seasonal variations, apple 50
 seed
 ascorbic acid treatment, mustard 3013
 bean (*Phaseolus*) 192, 5992
 carbohydrates, metabolism, fenugreek 3053
 Citrullus colocynthis 9032
 ethylene, capsicum 8758
 fruit storage, capsicum 6047
 germination
 fenugreek 5537
 fluorine toxicity, pea 6866
 onion 2833
 pea 2062, 2818, 5280, 8723
 squash 5964
 pea 218, 2061, 8723
 ripening, pea 8723
 storage, pea 8723
 temperature, capsicum 8758
 seedling
 bean (*Phaseolus*) 196
 herbicides, pea 2070
 Phalaenopsis spp. 5458
 seedlings
 amino acids, metabolism, bean (*Phaseolus*) 2029
 watermelon 8661
 shoot
 carbohydrates, metabolism, peach 3479
 nitrogen nutrition, pea 3741
 temperature, grapevine 5138
 tissue culture, asparagus 6020
 tomato 2127
 shoot-tip, tea, annual report, Sri Lanka 8262
 soil salinity, tomato 8778
 specificity 1673
 starch degradation, sugar cane 1647
 substrate discrimination 1702
 sulphur, deficiency, bean (*Phaseolus*) 3717
 tissue culture, carrot 694
 tuber slices, tissue culture, artichoke, jerusalem 130
 urea, grapevine 1119
 varietal differences, squash 164
 wound healing, coleus 280, 307
Enzymes
 biosynthesis
 coloured light, bean (*Vicia*) 8712
 magnesium nutrition, cucumber and gherkin 5963
 manganese nutrition, cucumber and gherkin 5963
 mustard 3012
 pea 7732
 tissue culture
 artichoke, jerusalem 3630
 chicory 7624
 capsicum 6895
 characterization, seed, heterosis, tomato 3810
 cotyledon, varietal differences, coffee 4059
 degradation, mustard 3012
 determination
 bean (*Phaseolus*) 8700
 fruit
 grapevine 1118, 5146
 pear 4278
 pea 8724
 root, bean (*Vicia*) 5999
 seedling, cucumber and gherkin 162
 diseased plants
 light, celery 8816
 pea 8718
 etiolated seedlings, pea 6008
 extraction
 bean (*Phaseolus*) 647
 Leucothoe spp. 8949
 mustard 2316-2317
 rhododendron 8949

Enzymes contd.

- extraction contd.
 spinach 8593
 flower, petunia 3851
 fruit
 citron 8095
 citrus, annual report, USA 2375
 date 8108
 disease resistance, apple 5736
 irradiation, banana 6390
 pawpaw 8170
 ripening, banana 6389
 tomato 2883
 latex, rubber 3254
 leaf
 light, sugar cane 8251
 ornamental plants 5895
 pea 2819, 3740
 photoperiodism, *Kalanchoe* spp. 7933
 Prunus spp. 32
 spinach 1959
 taxonomy
 apricot 7419
 Prunus mume 7419
 vegetables 5895
 plant
 banana 9134
 sugar cane 8252
 plum 523
 root
 bean (*Vicia*) 5999
 pea 1234
 secretion, abscission, ethylene 448
 seed, germination, pumpkin 7693
 seedling, mustard 3012
 shoot, pea 3742
 structure 1673
 treatment
 fruit, quality, date 8108
 root, amino acid absorption, pea 1239
 tuber, artichoke, jerusalem 8598
 varietal differences, sugar cane 8191
 vegetables 7692
 virus, control 888
Eotetranychus uncatus, population studies, fungicides, apple pests 5737
E. willamettei
 grapevine pests 1920
 predator-prey relationships, grapevine pests 1920
Ephialtes spp., biological control of, *Aegeria myopaeformis* 3409
Epicaempoptera spp., coffee pests, annual report, Nigeria 4035
Epicoccum spp., epiphyte, pecan 2653
Epidendrum spp.
 tissue culture
 leaf, media 6207
 root 4683
Epilachna chrysomelina, annual report, Cyprus 3604
E. varivestis, bean (*Phaseolus*) pests 3709
E. vigintioctopunctata, eggplant pests 670
Epilobium spp., taxonomy 266
Epiphyas posvittana, apple pests 1767
Epistrophe balteata, predator on, aphids, peach 1022
Eragrostis curvula, nematode population control, sugar cane 425
E. spp., as a cover crop, tea 8269
Erechtites spp., as weeds, sugar cane 9236
Erica spp.
 breeding and selection, annual report, Netherlands 4604
 diseases
 Ceratocystis stenoceras, annual report, German Federal Republic 8837
 Cylindrocladium scoparium, annual report, German Federal Republic 8837
 growing 7040
 in pots 2277
 plunging, lattice pot containers 2279
 transport 2278
 propagation, cuttings, media 8844
Erigeron flower
 cut
 preservatives 6979
 vase life 6979
Erigeron spp.
 flavonoids, taxonomy 3857
 taxonomy, flavonoids, content 3857
Erigeron varieties, comparative trials 3860

- Eriosechia brassica*, brussels sprouts pests, annual report, UK 3614
- Eriophyes gracilis*, raspberry pests, annual report, UK 3514
- E. vitis*, grapevine pests 5134
- Eriopsis connexa*, predator on, *Eriophyes vitis*, grapevine 5134
- Eriosoma ulmi*, small fruits, pests 5079
- Eruca sativa*
seed
oil, biosynthesis, rainfall 8982
production, rainfall 8982
- Erucaria* spp., as weeds, artichoke, globe 3633
- Erwinia amylovora*
apple diseases
annual report
German Federal Republic 6504
UK 8318
control, pear diseases, annual report, Canada 8314
as an epiphyte, pear diseases 5787
fruit trees and plants, diseases 6644
German Democratic Republic, apple diseases 1746
hawthorn windbreaks, pear diseases 85
hosts 6519
incidence
hawthorn diseases 4274
pear diseases 4274, 5049
pear diseases 3494, 4275, 6643
annual report
Netherlands 5698
UK 8318
resistance, breeding and selection, pear diseases 6637
varietal resistance
apple diseases 4208, 7336
pear diseases 3486, 5049, 5786
Pyracantha spp., diseases 2310
vectors
Minettia spp., pear diseases 5787
Pegomya spp., pear diseases 5787
- E. aroideae*, varietal resistance, tomato diseases 2873
- E. carotovora*
hyacinth diseases, annual report, Netherlands 2219
lettuce diseases 5915
marrow diseases 1190, 4454
ornamental plants, diseases 3915
seed germination, bean (*Phaseolus*) diseases 8677
varietal resistance
brussels sprouts diseases 4420
cabbage diseases 4420
onion, welsh, diseases 6034
pineapple diseases 5641
- E. chrysanthemi*
chrysanthemum diseases 4625
dahlia diseases, annual report, Netherlands 2219
enzyme activity, carnation diseases 4619
saintpaulia diseases 2939
- E. phytophthora*, seed germination, bean (*Phaseolus*) diseases 8677
- E. spp.*
control, tomato diseases 8780
storage rots, carrot 1308
varietal resistance, watermelon diseases 7675
watermelon diseases 2769
- E. tracheiphila*
varietal resistance
cucumber and gherkin diseases 5218
pumpkin diseases 5218
- E. vitivora*, planting material, treatment, grapevine diseases 7571
- Eryngium* spp., propagation, cuttings, root 4613
- Erysiphe cichoracearum*
control
begonia diseases 7848
cucumber and gherkin diseases 6820
marrow diseases 7385, 7686
cucumber and gherkin diseases 5206, 5225, 6819
annual report, German Federal Republic 7598, 8579
host nucleic acids, biosynthesis, cucumber and gherkin diseases 8662
mint diseases 336
okra diseases 160, 7757
- Erysiphe cichoracearum* contd.
scorzonera diseases 1160
squash diseases 6819
Trichosanthes spp., diseases 6823
varietal resistance
Aster spp., diseases 6992
cucumber and gherkin diseases 5945
cucurbits, diseases, annual report, India 3607
- E. communis*
host proteins, content, pea diseases 7730
varietal resistance, pea diseases 7730
- E. cruciferarum*
assessment methods, brussels sprouts diseases 5165
resistance, brussels sprouts diseases, annual report, UK 5149
- E. polyfaga*, begonia diseases 6229
- E. polygoni*
control, sweet pea diseases 7885
seed treatment
bean (*Phaseolus*) diseases 6847
pea diseases 6861
- E. spp.*, control 8305
- Erythrina lithosperma*
as shade plants
coffee 9163
tea 5662
- E. spp.*, as shade plants, cacao 7181
- E. suberosa*, alkaloids 5480
- Erythroneura zizac*
parasites, *Anagrus epos*, grapevine pests 5861
varietal resistance, grapevine pests 5861
- Erythronium* spp., tulipoides 8908
- Erythroxylon coca*, pests, review, Bolivia 5671
- Escallonia* spp., growing, peat, nutrition, nitrogen 8941
- Eschscholtzia*
enzyme activity, pollen germination 2213
pollen, germination, enzyme activity 2213
- Escontria* spp., edible fruits 822
- Essential oil**
Acanthospermum hispidum, medicinal properties 3016
Achillea castilaginea
bactericidal properties 8005
content, seasonal variations 8005
medicinal properties 8005
A. millefolium 9016
A. spp.
composition 3064
content 7983
Agathosma spp. 2324
Ageratum conyzoides, composition 9018
Aloysia triphylla 8991
Alpinia officinarum, composition 7965
Anethum sowa
composition 4757-4758
fungicidal properties 6256
Archangelica decurrens, content 8988
Arnica spp 1424
Arnica spp., composition 2353-2354
Artemisia spp. 329
composition 329
Atalantia monophylla, fungicidal properties 6256
avocado, composition 3094
bay laurel 4738
composition 7965
Blumea eriantha, medicinal properties 3016
Calamintha suaveolens 4738
Cananga odorata
composition, determination 8990
nutrition, annual report, Sarawak 3933
caraway
composition 325
content 8988
cardamoms 327
composition, determination 7066
determination 7974
carrot
content 7983
phytoene 2898
Catha edulis, content 3072
Cedrus atlantica, composition, determination 8990
celery, fungicidal properties 6256
Cephalophora aromatica, content 7983
chamomile 2352
- Essential oil** contd.
chamomile contd.
composition 3050
light, coloured 3081
content, nitrogen nutrition 3054
determination 6285
medicinal properties 4770
Cinnamomum cassia, composition 2325
cinnamon, composition 3015
citrus peel, estimation, method 371
citrus seed, annual report, USA 2375
Citrus spp., content, peel 6368
clove, composition 3018, 7965
Comptonia asplenifolia, composition 8995
Coreopsis spp. 7984
cumin, composition 1406
Curcuma zedoeria, fungicidal properties 6256
Cymbopogon martini 3039
C. spp.
nutrition, annual report, Sarawak 3933
production 1418
economics 1417
Daucus spp., composition 763
dill, composition 346
Dracocephalum renati, content 7983
Eucalyptus citriodora, composition 3030
E. fruticetorum
composition 7077
content 7077
E. spp.
Australia 4737
composition 3029
content 3029
Eugenia henyana, fungicidal properties 6256
fennel, composition 328
geranium
biosynthesis 4747
composition 5496, 5501, 7965, 7989
content 7989
ginger
composition 7965
volatile constituents 3022
grapefruit, alcohol determination 6369
grapefruit seed, constituents, sterols 1510
hop, composition, annual report, German Federal Republic 7087
Inula spp. 7110
jasmine, extraction 5497
Lantana indica, fungicidal properties 6256
L. spp., composition 1399
Laserpitium hispidum, content 7983
Lavandula spp., composition 7987
lavender 764, 6258
composition, varietal differences 7986
content
breeding and selection 8996
nectar removal by bees 5899
varietal differences 7986
quality, breeding and selection 8996
terpenoids 2326
variety trials 4740
lemon, volatile constituents 2412
lemon peel, content, varietal differences 4022
Leptospermum petersonii, Australia 4737
Leucas aspera, fungicidal properties 6256
lime (*Citrus*), composition 4023
Lindera spp., chemotaxonomy 5498
Lophanthus anisatus, content 7983
Margyricarpus pinnatus, composition 772
Melaleuca alternifolia, Australia 4737
M. cajeputi, composition 4741
mint 4738
composition 761, 1415, 3027, 3033, 3946-3947, 5499, 6259, 9000
harvesting, time of 6265
irrigation, sprinkler 6264
nitrogen nutrition 6263
potassium nutrition 6263
varietal differences 7081
constituents, annual report, USA 324
content 3946
irrigation, sprinkler 6264
nitrogen nutrition 6263
plant nutrition 6262
potassium nutrition 6263
soil pH 7080

Essential oil contd.

- mint contd.**
 content *contd.*
 varietal differences 7081
 wilting 4743
 diosphenolene, content 3032
 extraction 8999
 insecticides, residues 8997
 production 2328
 comparative trials, Tasmania 4744
 production and trade, USA 2327
 terpenes
 biosynthesis 1412
 content 1413
Monarda fistulosa
 biosynthesis 9001-9002
 composition 9002
 content 9001
M. spp. 4745
 Myricaceae
 chemotaxonomy 9003
 composition 9003
Myrtus spp., terpenes, content, leaf colour 4746
Nicotiana spp., composition 4644
Ocimum canum, fungicidal properties 6256
O. spp., nutrition, annual report, Sarawak 3933
 onion, analysis 1257
 orange
 aldehydes, content 1511
 content, virus incidence, stubborn 6345
 extraction 1511
 fungicidal properties 6256
Origanum glaucum, composition 3949
O. majorana, content, varietal differences 7976
O. spp. 4738
 pepper, black
 composition
 varietal differences 1404
 volatile constituents 7069
 content, varietal differences 7978
 determination 1404, 7066
 medicinal properties 3016
Perovskia spp., composition 3949-3950
 philadelphus, production, USSR 7082
 pimento, composition 7965
Piper cubeba, composition 7965
Pogostemon cablin
 composition, determination 8990
 nutrition, annual report, Sarawak 3933
 terpenes, biosynthesis 3036
Polyalthia longifolia
 fungicidal properties 6256
 medicinal properties 3016
Poterium polygamum, content 7983
 review 8973, 8989
Rosa spp., composition 4714
 rose 764
 biosynthesis 4747
 content
 climate 7990
 irradiation 5471
 plant nutrition 3952
 temperature 5471
 water relations 3952
 phosphorus, placement 3951
 terpenes 9004
 rosemary 4738
 determination 3024
Ruta spp.
 biosynthesis, tissue culture 9051
 composition 8037
 tissue culture, light 9051
Salmalia malabarica 1438
Salvia grandiflora 4738
S. sclarea 3037
S. spp.
 content
 seed treatment 3026
 soil moisture 6269
Sanguisorba spp., content 7983
Satureia spp. 329
 composition 329
 secondary, production, methods, 2322
Solidago virga-aurea, content 7983
Spartium junceum, content 7983
 spice oils, composition, determination 7066
 tagetes, content 7983

Essential oil contd.

- terpenes, content 3945
 thyme 4738
 determination 7991
 volatile constituents 1414
 turmeric, determination 7985
Vepris madagascariensis, composition 9007
 vetiver, nutrition, annual report, Sarawak 3933
Vetiveria spp., production, economics 1417
Zanthoxylum alatum, medicinal properties 3016
Ziziphora afghanica, composition 3949
Essential oil plants
 aroma, latitude 5678
 Australia 4737
 Bulgaria 6257
 Italy 6244
 light, quality, spectral, latitude 5678
 photoperiodism, latitude 5678
 seed, oil, biosynthesis 3336
 survey, annual report, Sarawak 3933
 temperature, latitude 5678
 wild, Crimea 862
 Ethiopia, capsicum, growing 4530
Ethylene
 biosynthesis 1673, 3335
 apple 6591
 protein metabolism, apple 2590
 review 5688
 bulb, initiation, onion 2086
 cell
 division, inhibition, pea 2065
 expansion, pea 2066
 wall composition, pea 7735
 wall structure, pea 4512
 chlorophyll, biosynthesis, cucumber and gherkin 2779
 concentration
 bulb, submersion 3837
 cutting, flooding 3837
 fruit, submersion 3837
 greenhouse, natural gas burners 1688
 plant, flooding 3837
 disease resistance, carrot 2141
 enzyme activity
 plant 1703
 root, carrot 2141
 sugar cane 4103
 enzymes, secretion, abscission 448
 exposure, bulb, bud opening, tulip 3880, 6185
 flower, senescence, rose 2297, 3922
 fruit
 abscission
 calamondin 8084
 citrus 2405, 3146
 orange 4009
 peach 2643
 colour, citrus 2410
 degreening
 mandarin and tangerine 4810
 orange 4810
 dehiscence
 okra 7465
 pecan 7465
 development, *Ficus sycomorus* 2636
 pigments
 orange 4814
 tangelo 4814
 ripening
 apricot 8428
 annual report, Australia 8313
 banana 3178
 Ficus sycomorus 2636
 fig 1008
 grapevine, report, Australia 6712
 pear 5791
 tropical fruits 4045
 geotropic responses, pea 2059
 growth substances, translocation, pea 2059
 horticultural uses, review 5688
 injury
 chrysanthemum 6132
 epinasty, tomato 5358
 flower bud, tulip 3880, 7909
 ornamental plants 6132
 petunia, annual report, Netherlands 6961
 prevention, greenhouse crops 8304

Ethylene contd.

- interaction
 growth substances, calamondin 8084
 light, chlorophyll biosynthesis, cucumber and gherkin 2779
 internode swelling, pea 4512
 leaf
 abscission
 bean (*Phaseolus*) 2035, 5259
 peach 2643
 nucleic acids
 biosynthesis, pea 2065
 metabolism, pea 4512
 physiology 3335
 pigments, biosynthesis, cabbage 3668
 plant, responses, review 5688
 pollen, germination, lily 1363
 pollen tube, growth, lily 1363
 production
 bulb, storage, tulip 3880
 flower, *Cymbidium spp.* 6209
 flower abscission layer, *Hibiscus spp.* 7049
 flower bud, cucumber and gherkin 3688
 fruit
 abscission, orange 2406
 growth substances
 apple 5003
 chlormequat, apple 1786
 ethephon, cranberry 2691
 storage
 avocado 1505
 capsicum 8758
 grapefruit 1505
 orange 3152
 fusaric acid, treatment, tomato 5358
 growth substances
 ABA, apple 975
 abscisic acid 1703
 pea, orange 2069
 auxins 1703
 bean (*Phaseolus*) 4481
 cabbage 8630
 Cymbidium spp. 6209
 cytokinins 1703
 dahlia 4653
 ethephon, olive 2422
 GA 1703
 pea, orange 2069
 IAA, pea, orange 2069
 kinetin, pea, orange 2069
 orange fruit 3148
 inhibition, growth substances, cycloheximide, bean (*Phaseolus*) 4483
 leaf, abscission, orange 2406
 photoperiodism
 cucumber and gherkin 3688
 dahlia 4653
 picloram, treatment, tomato 5358
 plastic bags, coloured 898
 red light, cabbage 8630
 respiration
 fruit 383
 apple 56
 seed, germination, lettuce 1977
 seedling, development, pea 1235
 stress-induced, bean (*Phaseolus*) 4483, 7720
 stressed branches
 apple 911
 peach 911
 proteins
 biosynthesis
 fig 1008
 fruit, abscission 448
 removal
 storage
 controlled atmosphere
 apple 981
 avocado 1464
 review 1704
 root, development, pea 2821
 seed, germination, lettuce 6788
 senescence regulation, abscission 448
 symposium 3335
 treatment
 apple, annual report, Australia 901
 bulb
 respiration, iris 2245
 tulip 6185
 cut flowers, carnation 2924

Ethylene contd.

- treatment *contd.*
 - cuttings, *Sedum* spp. 5456
 - flower, sex, cucumber and gherkin 5968
 - fruit
 - limonin, content, orange 5576
 - tomato 6103
 - pea 222-223
 - plant, anthocyanins, biosynthesis, cabbage 8630
 - root
 - lignin, biosynthesis, swede 5934
 - phenolic acid, biosynthesis, swede 5934
 - seed, lettuce, carbon dioxide presence 1154
 - shoot abscission, bean (*Phaseolus*) 6854
 - trunk, trees and shrubs 2979
 - xylem formation, pea 4511
- Etiella zinckenella**, *Tephrosia* spp., pests 1422
- Eucalyptus**, as an ornamental plant, annual report, Irish Republic 2909
- Eucalyptus citriodora**, essential oil, composition 3030
- E. fruticetorum**
essential oil
composition 7077
content 7077
growing, Argentina 7077
- E. spp.**
essential oil
Australia 4737
composition 3029
content 3029
growing, incontainers, root, growth control 7847
planting
root pruning 3007
time 3007
seedling, nursery treatment 3007
- Eucharis grandiflora**
flower, bud initiation, temperature 8909
flowering, temperature 8909
temperature
flower bud, initiation 8909
flowering 8909
- Eugenia cumini**, growth studies 9284
- E. cumini**, pollen, germination, media 2482
- E. henyana**, essential oil, fungicidal properties 6256
- E. jambolana**, flavonoids, content, flower 9285
- E. spp.**
growing, tropical America 377
leaf, anatomy 2483
- Eulecanium coryli**, peach pests 3476
- Eumarchalia gennadii**, biological control, carob pests, annual report, Cyprus 3980
- Eumerus strigatus**
bulbs, pests 7905
narcissus pests 7905
- E. tuberculatus**
bulbs, pests 7905
narcissus pests 7905
- Eumossula gracilis**, biological control, coconut pests 9158
- Euonymus europaeus**
alkaloids 7955, 8961
seed, alkaloids 7954
- Euonymus growth substances**
endogenous, leaf, senescence 3718
translocation, heteroauxin 1320
- Euonymus leaf**
abscission, growth substances, endogenous 3718
anthocyanins 744
phenolic compounds 744
- Euonymus propagation**, cuttings, media 708
- Euonymus spp.**, propagation, cuttings, media 8845
- Eupatorium odorata**, as weeds, control by, *Tephrosia purpurea*, coconut 8140
- E. spp.**, plant, composition, eupatolide 6282
- E. stoechadosmum**, alkaloids, determination 4766
- Euphorbia fulgens**
dwarfing, growth substances 6237

Euphorbia fulgens contd.

- flower, cut, production, programmes 6237
- growth substances
 - dwarfing
 - aminozide 6237
 - chlormequat 6237
 - responses, chlormequat 8842
 - photoperiodism, flowering 6237
 - temperature, flowering 6237
- E. spp.**, as weeds, oil palm 1601
- E. spp.**, as weeds, sugar cane 7235
- E. tinctoria**, plant, composition 1450
- Euphorbia longana**, diseases, witches' broom virus 3163
- Eupithecia spp.**, mango pests 4065
- Eupoecilia ambigua**, grapevine pests 4351
- Eupterote spp.**, coffee pests 1582
- Eutetranychus buxi**, chlorophyll degradation, aspidistra pests 741
- Eutetranychus orientalis**, predators, citrus pests 1488-1489
- Eutypa armeniaca**, apricot diseases 63, 3437
- Euxanthia hamana**, forecasting, light traps 1764
- Euzophora semifuneralis**, peach pests 3477
- Evergestis forficatus**, cabbage pests 5195
- Evodia danielii**, plant, composition 2359
- Exacum spp.**, growing, as pot plants, annual report, Canada 8836
- Exobasidium spp.**
azalea diseases, annual report, Belgium 8835
host anatomy, rhododendron diseases 8948
host-pathogen relationships, growth substances, rhododendron diseases 8948
- Exobasidium vexans**
control, tea diseases 8272-8273
tea diseases
annual report
India 1657
Sri Lanka 8262
- Fabiana imbricata**
plant, composition 2360
quinones, content 2360
- Fagara spp.**, alkaloids, content 2361
- F. zanthoxyloides**, root, extracts, medicinal properties 774
- Fats**
content
fruit
berry fruits 101
Guilielma gasipae 7272
seed, berry fruits 101
- Fatty acids**
content
seed, stone fruits 8424
walnut, nut 5069
determination, ion exchange chromatography, cacao bean 9144
- Feijoa**
growing, tropical America 377
iodine, content, fruit 7163
storage, fruit, composition 3162
- Feijoa fruit**, amino acids, content 3162
- Feijoa propagation**, annual report, USA 2375
- Feijoa seed**, treatment, gamma rays 8109
- Feltia subterranea**, cabbage pests, annual report, USA 4367
- Fennel**
aroma, latitude 5678
bibliography 8975
essential oil, composition 328
growing
media, compared 7605
peat 7605
insecticides
residues
plant
dimethoate 326
methyl-parathion 2320
- Fennel flower**, sex, growth substances, 2,4-dichlorophenoxybutyric acid 1407
- Fennel growth substances**, flower, sex, 2,4-dichlorophenoxybutyric acid 1407
- Fenugreek**
alkaloids, production, tissue culture 4778
bibliography 8975

Fenugreek contd.

- enzyme activity
growth substances, cytokinins 3977
light 3977
seed, germination 5537
- glycosides 3087
- light, enzyme activity, cotyledons, growth substances 3977
- nucleic acids, metabolism 8044
- sapogenins, determination 4777
- tissue culture
alkaloids, production 4778
seed callus
media 4778
vitamin B, treatment 4778
- Fenugreek growth substances**
enzyme activity, cotyledons, cytokinins 3977
nucleic acids, biosynthesis, kinetin 4776
- Fenugreek seed**
carbohydrates, metabolism, enzyme activity 3053
endosperm, dissolution 3976
sapogenins 5537
content, storage 3088
storage, sapogenins, content 3088
- Ferns**
annual report, USA 8834
insecticides, tolerance, annual report, Austria 265
pests, annual report, USA 1441, 6129
as weeds
pineapple 8172
rubber 4881
- Feronia elephantum**, coumarins 4767
- Fertilizers**
algae
enzyme activity, tomato nutrition 6098
fruit, ascorbic acid, content, tomato nutrition 6098
leaf, ascorbic acid, content, tomato nutrition 6098
- application
compressed tablets, rose, annual report, USA 6129
equipment 2511, 4131
foam 4915
irrigation
apple 947, 3394
container-grown plants, annual report, UK 3834
lily 3869
methods compared, lily 3869
under plastic mulches, rose, annual report, USA 6129
plastic perforated sachets, rose, annual report, USA 6129
soil injection, aqueous ammonia, brussels sprouts, annual report, UK 1937
trenches, tree fruits 8325
distillery effluent, sugarcane 1625
herbicides mixtures 1682
- liquid
container-grown plants 2170
cucumber and gherkin 5950
geranium 6983
greenhouse crops 4132
peat, begonia 6166
spinach beet 5904
oil palm debris ash, oil palm 9190
- placement
depth, apple 946
methods compared, root growth, apple 8377
planting trenches, apple 7350
seed drills, *Rosa* spp. 2993
sugar cane, annual report, USA 9221
- seaweed preparations 5098
apricot 4265
peach 4265
sewage sludge, vegetables, annual report, UK 3613
- slow-release
anthurium 7877
azalea nutrition 6224
begonia 6964
chrysanthemum nutrition 1332
container-grown plants, annual report, UK 3834
cyclamen 2227, 6964
geranium 6983
lily 3869

Fertilizers contd.

- slow-release contd.
- nursery stock, annual report, UK 6128
- peat, begonia 6166
- petunia nutrition 1342
- poinsettia 2282, 2984
- pot plants 6964
- roadside plants 3908
- spinach beet 5904
- sugar cane 4092
- annual report, USA 9221
- tomato 7785
- sugar cane filter cake 5659
- sulphur-coated, watermelon 3683
- town compost, grapevine 1911, 5847

Ferula jaeschkeana, terpenes 9039

Festuca pratensis

- lawns and sports turf
- breeding and selection, disease resistance 6195
- tillering, seed sowing, methods 6192

F. rubra, lawns and sports turf, Finland 7020

F. rubra

- as a cover crop, peach 7452
- overseeding, lawns and sports turf 2264
- seed, production 3896

F. spp.

- diseases
- Puccinia coronata* 5449
- Spermopora subulata*, annual report, Canada 3882
- grasses, lawns and sports turf, weed control 738
- lawns 2967
- lawns and sports turf
- breeding and selection 3884
- car parks 7919
- irrigation, requirements 8915
- mowing, population studies 8916
- nitrogen nutrition, population studies 8916
- tree root competition 303
- variety trials 7021, 7918
- weed incidence 8915
- orchard tracks 3890
- roadsides, establishment 3888
- weeds, lawns and sports turf 5443

Fibre plants, Indonesia 1674

Ficivora leucoteles, parasites, *Dasylogon*

ageriae, fig pests 73

Ficus elastica

annual report, Irish Republic 2909

diseases

- Cercospora* spp. 5452
- Gloeosporium elasticae* 788
- growth, studies 5454
- nutrition
- magnesium, annual report, USA 8834
- nitrogen, annual report, USA 8834
- potassium, annual report, USA 8834
- pests, *Aphelenchoides besseyi* 2270

F. sycomorus

- fruit
- development, ethylene 2636
- ripening 1811
- ethylene 2636
- growth substances 2636
- wounding 2636
- growth substances, fruit, ripening, ethephon 1811, 2636

Fig diseases

- Alternaria fici* 8450
- A. tenuis*, fruit storage 1010
- Botrytis cinerea* 8450

Fig diseases contd.

- Botrytis cinerea* contd.
- fruit storage 1010
- Cladosporium sicophilum* 8450
- Fusarium moniliforme* 8450
- Mucor* spp., fruit storage 1010
- Penicillium* spp., fruit storage 1010
- Rhizopus* spp., fruit storage 1010
- various, control 8450
- yeasts 8450

Fig fruit

- proteins, content 4941
- quality, growth substances, ethephon 1812
- ripening
- growth substances, ethephon 1812, 3455
- oil treatment 1009
- proteins, biosynthesis 1008

Fig growth substances

- fruit
- quality, ethephon 1812
- ripening, ethephon 1812, 3455
- injury, ethephon 1812
- proteins, biosynthesis, ethephon 1008

Fig leaf

- abscission, growth substances, ethephon 1812
- injury, growth substances, ethephon 1812
- temperature, photosynthesis 7325

Fig pests

- Ficivora leucoteles*, biological control 73
- mites 72
- predacious 72
- nematodes 1007
- various, vectors, diseases, unspecified 8450

Fig propagation

- budding, chip budding 1007
- cuttings 8449
- grafting 1007

Fig rootstocks, *Ficus* spp. 1007

Fig varieties, USSR 7438

Finland

- bedding plants, growing 8843
- cineraria, growing 8843
- petunia, growing 8843
- pot plants, growing 8843
- Fiorinia floriniae*, biological control, avocado pests 3983
- Fire-breaks, weed control, sugar cane 6434
- Flammigeroidia flammigera*, population studies, fruit trees and plants, pests 8326

Flavonoids

- content
- flower
- Eugenia jambolana* 9285
- statice 8877
- plant, Echinoidae 4727
- shoot, leaf, seasonal variations, *Pyrus* spp. 6646
- plant sources, India 7065
- Flemingia chappar*, flavonoids 6245
- F. congesta*, as a cover crop, oil palm 7209
- F. rhodocarpa*, flavonoids 6245
- F. spp.*, ground cover plants, coffee 7190

Flooding

- leaf
- composition
- sugar cane 2474, 8200
- tomato 2474
- root systems, sugar cane 8253
- varietal tolerance
- grapevine 5848
- sugar cane 8253

Flora

- Isles of Scilly, book 861
- UK 434

Flower

- bud initiation
- carbon dioxide, rose 3920
- chilling requirements, olive 818
- chromatin, activity, *Ipomoea* spp. 3849
- light, *Pharbitis* spp. 3848
- nitrogen, application, irrigation, apple 947
- nucleic acids
- biosynthesis, *Ipomoea* spp. 3849
- citrus 368
- photoperiodism, mustard 331, 333

Flower contd.

- colour
 - genetics, stock 285
 - latitude, ornamental plants 5678
 - seed, treatment, carnation 268
 - development, *Plumbago* spp. 323
 - extracts, taxonomic studies, *Aesculus* spp. 8957
 - insect attraction, pigments, rudbeckia 5415
 - nectar, sugars 5541
 - opening, mechanism, squash 2007
 - pigments
 - analytical methods, *Tagetes* spp. 286
 - chrysanthemum, annual report, UK 3832
 - development, *Impatiens* spp. 284
 - ornamental plants, annual report, Belgium 5386
 - removal
 - chemical, strawberry 8519-8520
 - for later cropping, strawberry 8519-8520
 - senescence, growth substances, abscisic acid, rose 3922
 - sex, nitrogen, cucumber and gherkin 166
- Flowering**
- cold treatment, freesia 7897
 - date
 - bulb, storage temperature, narcissus 3872
 - Cymbidium* spp. 7937
 - forecasting
 - temperature, apple 2592
 - temperature sums
 - apple 2593
 - fruit trees and plants 2379
 - plant nutrition, tomato 8773
 - temperature, *Cymbidium* spp. 7937
- light**
- intensity
 - alstroemeria 7875
 - peach 3491
 - pear 3491
 - supplementary
 - alstroemeria 7875
 - carnation 3839
 - phosphorus nutrition, apple 7368
 - photoperiodism
 - alstroemeria 7875
 - holly 6215
 - Zygocactus* spp. 7028
 - precocity, trees and shrubs 5689
 - secondary
 - pecan 1038
 - photoperiodism
 - holly 6215
 - strawberry 3555
 - prevention, orange 8092
 - walnut 2664
- Flowers, cut**
- air pollution, sulphur dioxide, ethylene, injury 6132
 - annual report, Belgium 5386
 - deterioration, review 1327
 - ethylene treatment, carnation 2924, 4621
 - fluorine
 - injury
 - gladiolus 7006
 - tap water 2913
 - grading
 - annual report, Netherlands 1314
 - economics, rose 749
 - mechanical, rose 6232
 - harvesting in bud, chrysanthemum 8866
 - keeping quality, nutrition, rose 748
 - nitrogen, metabolism, rose 3924
 - opening
 - preservatives, gladiolus 7901
 - treatment
 - chrysanthemum 4631
 - growth substances, Aadural-AK 719
 - 8-hydroxyquinoline citrate, chrysanthemum 8866
 - packing
 - cooling, carnation 6969
 - mechanical, rose 6232
 - methods compared, gladiolus 7901
 - pest control, post-harvest treatment, chrysanthemum 6976
 - preservatives 1327, 2997
 - carnation 7852
 - Chrysanthemum maximum* 6979

Flowers, cut *contd.*

- preservatives *contd.*
 - erigeron 6979
 - floret opening, gladiolus 7901
 - fluorine injury mitigation 2913
 - growth substances
 - abscisic acid, rose 2301
 - ancymidol, tulip 3879
 - benzothiadiazole, carnation, annual report, USA 3835
 - Phosphon, tulip 3879
 - rose 7950
 - 8-hydroxyquinoline citrate, gladiolus 7006
 - larkspur 6161
 - nutrients, rose 3924
 - perennial flowers 4611
 - sugars, rose 7950
 - production
 - dahlia 7894
 - economics
 - Aalsmeer 705, 4608
 - annual report, USA 3835
 - Lobelia fulgens* 2215
 - Norway 5387
 - programmes
 - Euphorbia fulgens* 6237
 - rose 6231
 - senescence
 - ammonia, content, rose 3924
 - respiration, carnation 7852
 - rose 2297, 3922
 - sugars, content, carnation 7852
 - storage, carnation 2182
 - transport, vacuum cooling 2164
 - vase life
 - anthurium 6158
 - carnation 4621
 - chrysanthemum 718
 - narcissus 4664
 - perennial flowers 4611
 - rose 7950
 - water relations 1327
 - xylem blockage 2997
- Flowers, wild**
- flora, UK 434
 - Isles of Scilly, book 861
- Fluorine**
- application
 - fruit
 - composition, peach 5767
 - firmness, peach 5767
 - ripening, peach 5767
 - content
 - leaf, tea 6465
 - plant, air pollution, annual report, German Federal Republic 6481
 - determination, sugar cane 4089
 - tap water, content, injury, flowers 2913
 - toxicity 4130
 - calcium nutrition, tomato 6932
 - cut flowers, gladiolus 7006
 - cuttings, irrigation water, *Cordylone* spp. 7025
 - disease symptom intensification, freesia 7003
 - fertilizer impurity, freesia, annual report, Netherlands 6126
 - freesia 7003
 - annual report, Netherlands 6961-6962
 - gladiolus, annual report, USA 8834
 - leaf pigmentation, apple nutrition 5015
 - leaf pigments content, coleus 8922
 - pea 3735
 - phosphorus nutrition, freesia 2233
 - plant tolerance, ornamental trees and shrubs 7845
 - seed germination, enzyme activity, pea 6866
 - soft suture, peach 5767
 - transpiration, pea 3735
- Foam**
- frost protection
 - strawberry 8768
 - tomato 8768
 - horticultural uses 4915
- Folic acid, content, fruit, citrus 4816**
- Fomes lignosus**
- host reactions, rubber diseases 5645
 - planting site, preparation, rubber diseases 7223

Fomes lignosus *contd.*

- rubber diseases, annual report, France 3250
 - tea diseases, annual report, Sri Lanka 8262
- F. noxius**, tea diseases, annual report, Sri Lanka 8262
- F. spp.**, coffee diseases 4057
- Forcing**
- azalea, annual report, Netherlands 4604
 - capsicum
 - light, supplementary 2096
 - media compared 2096
 - chicory
 - annual report, UK 6774
 - economics 3639
 - irrigation, capillary 1151
 - methods compared 3639
 - soilless culture 5177
 - Cymbidium* spp., chilling requirements 7937
 - forsythia, economics, annual report, Netherlands 6126
 - freesia 2234
 - nutrition 2235
 - iris 1359
 - media compared, annual report, UK 8838
 - narcissus
 - annual report, UK 733
 - bulb, storage temperature 3872, 4663
 - Prunus triloba*, annual report, Netherlands 6127
 - rhubarb
 - chilling requirements 7759
 - dormancy 7759
 - strawberry
 - annual report
 - Belgium 1060
 - Netherlands 1068, 6670
 - chilling requirements 3553
 - dormancy 3553
 - light 5820
 - tunnels 3554
 - heating 2696
 - tulip 1365
 - annual report, UK 733, 3874, 7907
 - bulb, storage temperature 3875, 4663
 - chilling requirements 7913
 - growth substances 8907
 - labour requirements 7016
 - plunging under straw 6184
 - pre-cooling 1366
 - injury 2954-2955
 - temperature 8907
 - vegetables, plastic films, annual report, Netherlands 8581
- Forcipomyia** spp., pollinator, cacao 2445, 5612
- Forficula auricularia**, biological control of, *Aegeria myopaeformis* 3409
- Forsythia**
- breeding and selection, annual report, Netherlands 4604
 - forcing, economics, annual report, Netherlands 6126
 - growing
 - containers 2917
 - in containers, media 4689
 - potting composts, bark 2276
- Forsythia flower**, cut, fluorine injury, tap water 2913
- Forsythia growth substances**, retardants, chlormequat 6212
- Forsythia propagation**, cuttings 2917
- Fouquieria** spp., flower, composition 780
- Fragaria** spp., root, cation exchange capacity 4144
- Frames**
- crop rotation, vegetables 2737
 - plastic, mulching, strawberry, annual report, USA 1440, 5078
 - propagating, trees and shrubs 6134
 - ventilation
 - air temperature 2738
 - soil temperature 2738
- Frankliniella cubensis**, mango pests 4065
- Freesia**
- annual report
 - Netherlands 704, 6126, 6961
 - UK 3832
 - bromine, content, soil, fumigation, methyl bromide 5394

Freesia *contd.*

- cold treatment, flowering 7897
 - flowering
 - cold treatment 7897
 - date, planting depth 3867
 - fluorine
 - toxicity 7003
 - disease symptom intensification 7003
 - forcing 2234, 6165
 - nutrition 2235
 - hybrids, comparative trials 7896
 - nutrient absorption 2234
 - planting, depth, flowering date 3867
 - temperature
 - corm, development 8891
 - nutrient absorption 2234
 - responses 7898
- Freesia corm**, development, temperature 8891
- Freesia diseases**
- Botrytis gladiolorum* 2236
 - leaf necrosis, synergism, fluorine 7003
- Freesia flower**
- cut
 - fluorine injury, tap water 2913
 - preservatives, fluorine injury mitigation 2913
- Freesia nutrition** 2233
- annual report, Netherlands 6962
 - general
 - deficiency symptoms 2233
 - salinity damage 2233
 - NPK 2234
 - placement 2235
 - phosphorus, sources, fluorine toxicity 2233
- Freesia propagation**, tissue culture 2232
- Freesia seed**
- composition 2943
 - oil 2943
- Freesia soil**, fumigation, methyl bromide, plant composition, bromine 5394
- Freesia varieties**
- comparative trials 7896
 - fluorine, toxicity, resistance 7003
- French West Indies**, vegetables, a new journal 5668
- Fritillaria** spp.
- growing 5440
 - as an ornamental plant 4668
 - photosynthates, translocation 2964-2965
 - seed, sugars, content 8883
 - tuliposides 8908
 - USSR 4668
- Frost** (*see also* Cold; Winter hardiness)
- damaged plants
 - pruning and training
 - cherry 2622
 - grapevine 1098
 - forecasting
 - fruit trees and plants 1709
 - techniques, annual report, USA 790
 - injury
 - apricot 8425
 - bark, apple 2556
 - bud development
 - apple 1709
 - apricot 1709
 - cherry 1709
 - peach 1709
 - pear 1709
 - plum 1709
 - chloroplast, damage, light, cucumber and gherkin 2003
 - critical temperatures, fruit trees and plants 4158-4159
 - disease incidence
 - cabbage 146
 - Pseudomonas pisi*, pea 4503
 - flower bud
 - apricot 4235
 - cherry 4235
 - development
 - plum 4290
 - Prunus* spp. 4290
 - initiation, cranberry 534
 - peach 4235
 - frequency, topography 876
 - fruit
 - apple 964
 - annual report, Australia 5693
 - leaf, removal, apricot 5756

Frost contd.

- injury *contd.*
 measurement, apple 6539
 petiole, ice formation, saintpaulia 2935
 plant nutrition, ornamental plants, annual report, USA 1441, 6129
 position on slope, grapevine 5112
 pruning and training, time of, apple 8362
 recovery, grapevine 7559
 root
 apple 2554
 cherry 2554, 2622
 grapevine, annual report, German Federal Republic 6669
 strawberry 2554
 seed, rose 2991
 shoot
 apple 2587
 cell water relations, apple 7397
 cherry 6617
 ice formation
 azalea 5019
 cherry 5019
 mechanism, apple 7353
 slope orientation, grapevine 5112
 sucrose, content, sugar cane 9232
 thawing rate, grapevine 4342
 trunk, apple 8351
 occurrence, water, temperature above 876
 protection
 apple, annual report, UK 8317
 calcium chloride 5924
 cherry, annual report, USA 8319
 citrus, annual report, USA 790
 covers
 plastic, mandarin and tangerine 7130
 pruning and training, lemon 3110
 dimethylsulphoxide 5924
 earthing-up, grapevine 7559
 flowering date
 growth substances
 cherry 8432
 tung 4828
 foam
 strawberry 8768
 tomato 8768
 fogging, citrus 5550
 fruit trees and plants 1709
 glycerol 5924
 heaters
 peach 28
 annual report, USA 451
 pear 28
 irrigation, management, mist occurrence 876
 plastic films
 apple 3358
 peach 3358
 plastic water-filled mattress, vegetables, annual report, Netherlands 8581
 soil management techniques, in relation to standing water 876
 sprinkler irrigation, tunnels, bean (*Phaseolus*) 2016
 sucrose 5924
 temperature data
 avocado 6335
 citrus 6335
 white paint, apple 933
 wind machines, citrus 5549
 resistance
 ascorbic acid, content, cherry 2627
 breeding and selection, citrus 3106
 bud dormancy, grapevine, annual report, Czechoslovakia 6713
 carbohydrates
 content
 citrus 3131
 Citrus junos 3131
 grapevine 1929
 rose 338
 metabolism, apple 6580
 cell sap concentration, grapevine 5110
 dormancy, black currant 6671
 drought resistance, peach 7444
 electrical conductivity, fruit trees 4994
 enzyme activity
 grapevine 5138
 plum 7477
 Prunus spp. 7477

Frost contd.

- resistance *contd.*
 flower bud development
 nectarine 7440
 peach 7440
 fruit set, grapevine, annual report, Czechoslovakia 6713
 growth substances, apple 8399
 hardening, respiration, pea 654
 herbicides, dichlobenil, peach 1819
 irrigation, sugar cane 9233
 light, black currant 4310, 6671
Malus spp. 4187
 nitrogen
 content
 citrus 3131
 Citrus junos 3131
 nitrogen nutrition, black currant 8485
 phosphorus nutrition, black currant 8485
 photoperiodism, black currant 4310, 6671
 plant nutrition
 apple 4971
 strawberry, annual report, Canada 538
 polyloids, citrus 7129
 potassium nutrition, apple 4974
 proteins, content, grapevine 1927
 protoplasmic properties, varietal differences, grapevine 8539
 pruning and training, grapevine 5110
 redox regime, grapevine 3590
 respiration
 plum 7477
 Prunus spp. 7477
 rootstock compatibility, apple 2555
 rootstock-scion relationships
 apple 3392, 8351
 cherry 2622
 shoot temperature, grapevine 5835
 soil management, methods compared, apple 6538
 soil type, moisture holding capacity 876
 stem tissues, variability, apple 2587
 testing
 electrical conductivity
 fruit trees 4994
 grapevine 6726
 trees and shrubs 2158
 annual report, Canada 2154
 varietal resistance, apple 6528
 varieties
 apple 4187
 apricot 7420
 France
 berberis 2158
 cotoneaster 2158
 pyracantha 2158
 sugar cane 9233
 USSR, cherry 8430
 water content, grapevine 5111, 8566
 water relations
 apple 6574
 Prunus spp. 7061
 studies, artificial freezing techniques, apple 7396

Fruit

- abscission
 growth substances, ethephon, cherry 2631
 symposium 448
 abscission layer
 anatomy, cherry 501
 composition, cherry 499
 enzyme activity, citrus 2405, 3146
 histochemistry, cherry 2631
 histology, cherry 501
 acidity, reduction, chemicals, calamondin 4021
 cracking
 anti-transpirants, cherry 4239
 pericarp, morphology, tomato 2128
 stomata, water absorption, cherry 3445
 temperature, cherry 3443
 varietal resistance cherry 3444
 cuticle, structure, cherry 2618
 degreening
 ethylene
 mandarin and tangerine 4810
 orange 4810

Fruit contd.

- detachment force, measurement, tomato, annual report, USA 4368
 drying 22
 flavour
 evaluation, methods, banana 4837
 storage, box preservatives, annual report, USA 3348
 irradiation
 gamma rays
 post-harvest
 avocado 1462
 mango 1596
 maturity
 colour chart, tomato 2853
 indices, pear 3497
 tests
 apple 1789-1790
 annual report, USA 24
 peach 5777
 pear 1789-1790
 parthenocarp
 growth substances
 DPX 1840, cucumber and gherkin 5968
 endogenous, photoperiodism, blueberry 3530
 pigments
 biosynthesis, temperature, grapevine 3595
 content
 apple 58
 blueberry 1065
 pear 58
 disorder incidence, apple 6594
 fruit trees and plants 5691
 quality
 assessment, optical density 3434
 evaluation
 apple 488
 mandarin and tangerine 6365
 methods, banana 4837
 removal force, measurement 893
 ripening 897
 growth substances, ethephon, tropical fruits 4045
 oil treatment, fig 1009
 propylene treatment, ethylene, production 383
 respiration, ethylene, production, apple 56
 root, composition, grapevine 1123
 sampling, methods 1679
 senescence 5690
 set, time from flowering, varietal differences, India, capsicum 6045
 size, seed, number per fruit, orange 4808
 skin, structure, apple, annual report, UK 903
 storage, controlled atmosphere, systems, nitrogen addition 3361
 sugars, determination, methods compared, tomato 2137
 thinning
 mechanical, shaker, plum 524
 tree fruits, annual report, Australia 450
 transport
 chutes, grapevine 4358
 pallets, high density planting 3362
 wax, structure, cherry 2618
Fruit trees and plants
 air pollution
 injury
 peroxyacetyl nitrate, nitrogen oxides 4130
 plant responses 3306
 photochemical oxidants 3306
 amino acids, content 449
 annual report
 Belgium 902
 Canada 5695
 Italy 6507
 UK 867
 bark, temperature, measurement, annual report, USA 3357
 bud
 temperature, measurement, annual report, USA 3357
 terminology 4154
 climate
 microclimate 1708
 control, annual report, USA 3357

Fruit trees and plants contd.

- clones, review 7290
- cold, protection, white paint 1730
- cover crops
 - annual report, Belgium 4942
 - comparative trials 1711
- diseases
 - Agrobacterium rhizogenes* 7318
 - A. tumefaciens* 7318
 - book 1689, 6517
 - control, France 4138
 - Erwinia amylovora* 6644
 - German Democratic Republic 1691
 - mycoplasma, review 890
 - Phyllosticta prunicola* 6657
 - Phytophthora cinnamomi* 7318
 - Rossellinia necatrix* 7318
 - Sclerotium rolfsii* 7318
 - virus, review 1715
- disorders
 - book 1689
 - chlorosis 7319
 - iron deficiency 1714
 - rosetting 913-914
- drought 8285
- dwarf, for experimental work 869
- flower, development, phosphorus nutrition 5705
- flowering, climate 1708
- fluorine, toxicity 4130
- frost
 - forecasting 1709
 - protection 1708-1709
 - heaters, annual report, USA 3357
- fruit
 - colour, light, intensity 1708
 - coumarins, content 8446
 - metabolism, potassium 5705
 - packing 8312
 - size, light, intensity 1708
 - storage, annual report, Belgium 4942
 - sugars 5541
 - thinning, annual report, Belgium 4942
 - transport 8312
- fungicides 3316
 - application, general, adjuvants 5686
 - residues, determination, benomyl 3327
- growing
 - book 900, 6472, 6476
 - Kazakhstan 2514
 - book 2513
 - mechanization 2511
 - Northern Caucasus, symposium 5700-5701
 - Rumania 4151
 - student's manual 436
 - USSR 2521
 - Yugoslavia 2520, 2522
- growth chambers
 - construction 4152
 - operation 4152
- growth studies 1713
- growth substances
 - responses
 - aminozide 8328
 - chlormequat 8328
 - ethephon 8328
 - GA 4148
 - morphactins 8328
 - TIBA 8328
 - wound healing
 - IAA 8327
 - IBA 8327
- hail, damage, prevention, chemical treatment of clouds 3393
- harvesting
 - mechanical
 - catching frames 2531
 - equipment 8331
 - review 1717
 - mobile platform 1716
- herbicides, residues, determination, 2,4-D 6514
- Indonesia 1674
- insecticides
 - residues
 - plant 4141
 - tamaron 4143
- irrigation 3308
 - sprinkler 2526
 - trickle 1046

Fruit trees and plants contd.

- irrigation contd.
 - water
 - composition
 - boron 5163
 - chlorine 5163
 - sodium 5163
- leaf analysis, review 7369
- light
 - intensity
 - flowering 1708
 - fruit
 - colour 1708
 - size 1708
- magnesium, content, plant, fruiting 5705
- mercury, determination 3315
- meteorology 1708
- mulching, peat 4190
- mutants, induction, review 2492
- nitrogen, content, plant, fruiting 5705
- nutrients, content, fruiting 5705
- nutrition 881, 4121
 - annual report
 - Belgium 4942
 - Canada 5694
 - bismuth, leaf analysis, standards 2496
 - boron
 - chlorosis 7319
 - deficiency 6499
 - fertilizers, application, trenches 8325
 - general
 - colloquium 6479
 - deficiency
 - control measures 881
 - diagnosis 881
 - leaf analysis 5681
 - iron 1714
 - chlorosis 7319
 - leaf analysis, standards 2496
 - lead, leaf analysis, standards 2496
 - magnesium, application, methods
 - compared 866
 - nickel, leaf analysis, standards 2496
 - nitrogen, review 4162
 - phosphorus, flower, development 5705
 - zinc, application, foliar 913
- orchard renewal, methods compared 4157
- ozone, injury 4130
- pests
 - Arvicola terrestris*, control 8306
 - biological control, *Bacillus thuringiensis* 447
 - Caliroa cerasi*, biological control 31
 - control, France 4138
 - German Democratic Republic 1691
 - integrated control, review 912
 - leafhoppers, survey 8326
 - Meloidogyne arenaria* 4931
 - M. incognita* 4931
 - Quadraspidiotus perniciosus* 1759, 7322
 - tortriciids, light traps 1764
 - voles 8306
 - annual report, German Federal Republic 6505
 - control 8306
- phosphorus, content, plant, fruiting 5705
- plant, morphology, review 5705
- planting
 - high density, light interception 1710, 2558
 - mechanical 6516
 - systems, light interception 1708, 2558
- potassium
 - content, plant, fruiting 5705
 - fruit, metabolism 5705
- production and trade, UK 4120
- products and by-products
 - canned fruit, review, UK 4120
 - juice, review, UK 4120
 - wine, review, UK 4120
- propagation
 - grafting
 - compatibility studies, tissue culture 3567
 - mechanical, equipment 4179
 - methods, tropics 875
 - union, incompatibility, detection 6509
- nursery stock, production, economics 5702

Fruit trees and plants contd.

- pruning and training
 - annual report, Belgium 4942
 - book 2527
 - historical survey 4161
 - palmette 5704
 - book 6513
 - slender spindle 5704
 - translocation disruption 910
 - wound dressings 8327
 - replanting 6551
 - research
 - Poland 6520
 - Yugoslavia 2519
 - root, systems, study methods, book 1
 - soil
 - cultivation, machines 7317
 - erosion, control 3310, 8325
 - magnesium, availability 866
 - nitrogen, availability 866
 - nutrients, disorder incidence, chlorosis 7319
 - phosphorus, availability 866
 - potassium, availability 866
 - requirements, Crimea 453
 - spraying
 - equipment, low-volume 7323
 - low volume, annual report, Belgium 4942
 - sulphur dioxide, injury 4130
 - temperature
 - measurement, microclimate, annual report, USA 3357
 - modification apparatus 906
 - varieties
 - Hungary, book 3355
 - National Fruit Trials, UK, history 3351
 - register 3353
 - Canada 5670
 - USA 5670
 - virus-tested plants, nursery stock, France 2524
 - water relations, climate 1708
 - weed control 909, 1681, 1712, 4924, 5680
 - Glechoma* spp. 909
 - windbreaks 7315
 - wound dressings 8327
 - wound healing, growth substances 8327
 - yield, estimation, annual report, Belgium 4942
- Fruiting**
- date
 - forecasting, temperature sums, fruit trees and plants 2379
 - plant nutrition, tomato 8773
- Fruits, edible, unusual, book 435**
- Fuchsia flower, cation exchange capacity, composition 7874**
- Fuchsia growth substances**
- responses, chlormequat 8842
 - retardants, Pydanon 2163
- Fuchsia pests**
- Trialeurodes vaporariorum*
 - annual report, UK 6128
 - control 7956
- Fuchsia plant, cation exchange capacity, composition 7874**
- Fuchsia spp., taxonomy 266**
- Fulvic acid, pectins, content, tomato 6072**
- Fumaria indica, alkaloids, content 1451**
- F. officinalis**
- alkaloids 8023
 - growing, USSR 8023
- Fumigation**
- cuttings, methyl bromide, rhododendron 747
- fruit**
- 2-amino butane, apple storage 990
 - ethyl formate, date storage 813
 - ethylene dibromide
 - ethylene production 3152
 - residues 3152
 - hydrogen phosphide, date storage 813
- soil**
- chloropicrin, *Phytophthora* spp., raspberry 5087
 - DBCP, *Phytophthora* spp., raspberry 5087
- DD**
- disease control
 - citrus 4787

Fumigation contd.

- soil contd.
- DD contd.
- disease control contd.
- strawberry 3547
- pest control, citrus 4787
- Phytophthora* spp., raspberry 5087
- Di-Trapez, disease control, bedding plants 2206
- 1,3-D, *Phytophthora* spp., raspberry 5087
- methyl bromide
- disease control
- anemone 2221
- bedding plants 2206
- Phytophthora* spp., raspberry 5087
- residues
- ornamental plants 5394
- plant, lettuce 2755
- soil, lettuce 2755
- methyl isothiocyanate
- disease control
- anemone 2221
- strawberry 3547
- propargyl bromide, *Phytophthora* spp., raspberry 5087
- Vapam, disease control, anemone 2221
- Fungi, edible species** 2907, 6122 (see also Mushroom)
- Agaricus arvensis* 6958
- A. augustus* 6958
- A. bitorquis* 6958
- A. edulis* 6958
- Boletus edulis* 6958
- Collybia velutipes* 7842
- Lentinus edodes* 6958
- Lepista nuda* 6958
- Pholiota mutabilis* 6958
- Pleurotus* spp. 2907, 6122, 6124, 6958
- Stropharia rugosa annulata* 6958
- Volvariella volvacea* 4603, 5382, 6958
- spores, leaf surface, examination techniques 8291
- Fungicidal properties**
- Brassica* spp. 9033
- Curcuma* spp. 9033
- essential oil plants 6256
- Fungicides**
- Acrex, as acaricides, apple 6571
- Acracid, as acaricides, apple 6571
- 2-aminobutane, residues, fruit, citrus, annual report, USA 2375
- ammonium compounds, application, packing straw, pomegranate 9118
- Bavistin, fruit, quality, apple 5731
- Bayer 47351, injury, strawberry 8514
- benomyl
- absorption, tea 6460
- as acaricides
- apple 5734
- bean (*Phaseolus*) 5253
- additives, cormels, gladiolus 1358
- adsorption, strawberry, annual report, UK 7489
- air pollution injury, prevention, bean (*Phaseolus*) 3698
- application
- under air pressure, setts, sugar cane 8229
- methods compared
- Aechmea* spp. 4673
- cormels, gladiolus 1358
- grapevine 1917
- tomato 6919
- wax coatings, orange 6362
- surfactants 2875
- disease increase, lily 7903
- earthworm populations, apple 1752
- flowering, nerine, annual report, Netherlands 6127
- fruit
- ripening, stone fruits 2632
- russeting
- annual report, German Federal Republic 6506
- apple 1747, 8391
- growth reduction, campanula 6160
- injury
- application methods, *Aechmea* spp. 4673
- carnation 714
- fruit russeting, apple 1747
- mango 4873

Fungicides contd.

- benomyl contd.
- injury contd.
- melon (cantaloup and musk) 5965
- mushroom 3829
- annual report, UK 6773
- pot plants 5393
- strawberry 1073
- Tagetes* spp. 1146
- insect control, chrysanthemum 6973
- metabolism
- carnation 715
- pea 655
- mite control
- Cecidophyopsis ribis*, black currant 4309
- chrysanthemum 6973
- mycoplasma control, *Santalum* spp. 3038
- nut, set, pecan 8473
- ozone, injury, prevention, bean (*Phaseolus*) 1210, 6840
- persistence
- carnation 715
- orange 9099
- soil 1146
- strawberry, annual report, UK 7489
- plant, responses, melon (cantaloup and musk) 5965
- residues
- determination 6501, 7301
- apple 7609
- fruit trees and plants 3327
- mushroom 7609
- strawberry 7609
- vegetables 3327, 7609
- flower, apple, annual report, UK 903
- fruit 1698
- apple, annual report, Australia 5693
- currants 4308
- orange 9099
- review, mushroom 702
- seed treatment, vegetables 6861
- soil micro-organisms, apple 8391
- tolerance, carnation 269
- translocation
- carnation 716
- orange 9099
- strawberry 5102
- yield increase, mushroom 3829
- benzimidazole, ozone, injury, prevention, bean (*Phaseolus*) 1210
- binapacryl, residues, determination, tree fruits 7324
- biphenyl
- application, wax coatings 2404
- residues, fruit, citrus 2404, 9107
- bordeaux mixture
- enzyme activity
- apricot 4952
- inhibition, apricot 4952
- fruit, set, grapevine 6755
- injury
- pineapple 3249
- stone fruits 6612
- persistence 1748
- respiration 4951
- Brestan, injury, pineapple 3249
- captafol
- application, methods compared, annual report, Kenya 3191
- persistence 1748
- residues, determination, fruit 2505
- captan
- application
- under air pressure, setts, sugar cane 8229
- wax coatings, tomato 6105
- cuttings, treatment, peach rootstocks 1817
- earthworm populations, apple 1752
- injury
- Panax ginseng* 3052
- strawberry 109, 1073
- mite populations, apple 5737
- residues
- determination, fruit 2505
- fruit, apple, annual report, UK 8318
- carboxin, application, adjuvants, lemon 3130

Fungicides contd.

- Ceresan, injury, prevention, *Aechmea* spp. 4673
- chinosol, injury, grapevine 7553
- chloroneb, synergism, seed treatment, pea 7731
- chlorothalonil, injury, chrysanthemum 6973
- copper
- disease control, review 1694
- injury, guava 4063
- residues
- leaf, coffee 2451
- plant, marrow 1190
- copper compounds, synergism, insecticides, annual report, India 1657
- copper oxychloride, injury, currants 4308
- CTP-Cu, application, surfactants, onion 6875
- DCNA, residues, fruit, peach 5780
- Dealan, persistence 1748
- Dexon, plant, height, chrysanthemum 6146
- dichlofluanid
- injury, strawberry 547, 1073
- residues
- fruit
- raspberry, annual report, UK 7489
- strawberry 1073
- dichlozoline
- persistence, lettuce 7633
- residues
- determination 8590
- grapevine 6758
- fruit, grapevine 6758
- Difolatan, compatibility, tomato 1288
- dimethirimol, application, methods compared, melon (cantaloup and musk) 5221
- dinitrophenols
- protective ability
- apple 7385
- marrow 7385
- dinocap, injury, grapevine 1914
- diphenylamine, application, packing straw, pomegranate 9118
- Dithane M45, application, wax coatings, tomato 6105
- dithiocarbamates, chloroplast, activity, bean (*Vicia*) 8713
- DPA, disorder incidence, apple 5005
- Enovit
- fruit, russeting, apple 8391
- soil micro-organisms, apple 8391
- ethazol, injury, carnation 7851
- ethoxy trichloromethylthiadiazole, plant, height, chrysanthemum 6146
- ethylenebisdithiocarbamates, residues, fruit, apple 4218
- etridiazol, injury, tulip 2259
- fentin acetate, residues, celery 2900
- fentin hydroxide
- insect control, *Ascotis selenaria*, coffee 3205
- nut, set, pecan 8473
- ferbam, enzyme activity, inhibition, apricot 4952
- folpet
- injury, rose 2995
- persistence 1748
- residues, determination, fruit 2505
- Foltapet 1116
- residues, fruit, grapevine 1116
- general
- application
- adjuvants
- fruit trees and plants 5686
- tomato 5686
- insecticide mixtures
- application, reduced concentration, apple 2585
- cucumber and gherkin 6820
- fruit
- ascorbic acid, content, apple 2585
- russeting, apple 1769
- sugars, content, apple 2585
- responses, garlic 6023
- interaction
- herbicides, shallot 1258

Fungicides contd.

interaction contd.

nematicides, lawns and sports turf 2266

mancozeb

additives, Nu-Film 17, capsicum 6043
residues, fruit, currants 4308

maneb

injury, *Panax ginseng* 3052

residues, fruit, currants 4308

MBC, translocation, strawberry 5102

mercurial, injury, strawberry 109

mercury compounds, injury, coffee 3193

Mertect, injury, carnation 714

Morestan

as acaricides, apple 6571

injury, black currant 7499

NF-35, application, methods compared,

Aechmea spp. 4673

nickel compounds, synergism, insecticides,

annual report, India 1657

oil formulations, injury, apple 473

oils, injury, banana 1542

O,O-diethyl phthalimidophosphonothioate

8305

orthophaltan, respiration 4951

oxycarboxin

translocation

growth substances

almond 5707

chestnut (*Castanea*) 5707

peach 5707

PCNB, application, under air pressure,

setts, sugar cane 8229

phenylphenol

residues

determination, citrus 4018

fruit, citrus 9107

Polymarcin, respiration, enzyme activity,

apple 6578

quintozene

injury

application, method, lettuce 1970

strawberry 109

residues

determination

banana 3331

vegetables 3331

RH 90

fruit, acidity, grapevine 3579

yield increase, grapevine 3579

Santar, wound healing 4207

Sclex

residues

determination, grapevine 1924

fruit, grapevine 1924

Selinon, respiration, leaf bud, stone fruits

4951

sodium α -phenyl phenate, application, wax

coatings, tomato 6105

sodium 2-phenylphenate

application, wax coatings 2404

residues, fruit, citrus 2404

streptomycin

absorption, hop 1419

residues

hop 1419

leaf, tomato 2125

plant, marrow 1190

translocation, hop 1419

sulphur, mite populations, apple 1756

sulphur compounds, application, packing

straw, pomegranate 9118

systemic

application, methods compared,

ornamental plants, annual report,

German Federal Republic 6959

book 4927

review 444, 7297

TBZ

additives, cormels, gladiolus 1358

application

adjuvants, lemon 3130

methods compared, cormels, gladiolus

1358

residues, citrus, annual report, USA

8051

Terrazole

persistence, soil, plant, tomato 6086

translocation, tomato 6086

thiabendazole

application, methods compared, wax

coatings, orange 6362

Fungicides contd.

thiabendazole contd.

determination, citrus 2403

earthworm populations, apple 1752

injury, mango 4873

persistence, soil, plant, tomato 6086

residues

determination 4806, 6501

orange 4019

tree fruits 7156

fruit 4806

apricot, annual report, Australia

5693

banana, annual report, Australia

5600

citrus 4813

orange 4019

tree fruits 7156

translocation, tomato 6086

thiocarbamates, respiration, enzyme

activity, apple 6578

thiophanate

as acaricides, apple 5734

earthworm populations, apple 1752

injury, melon (cantaloup and musk)

5965

plant, responses, melon (cantaloup and

musk) 5965

residues

determination

apple 7610

vegetables 7610

thiophanate methyl

as acaricides, apple 5734

fruit, russetting, apple 1747

plant, responses, melon (cantaloup and

musk) 5965

thiophanates, residues, determination,

bean (*Phaseolus*) 4477

thiram

application, wax coatings, tomato

6105

cuttings, treatment, peach rootstocks

1817

fruit, thinning, apple 974

injury, strawberry 1073

residues, plant, lettuce 7634

synergism, seed treatment, pea 7731

tainting, strawberry, annual report, UK

1872

TMTD

enzyme activity, inhibition, apricot

4952

plant

height, *Hippophae* spp. 7957

size, *Hippophae* spp. 7957

respiration 4951

tolerance, annual report, Austria 265

tri-dimethyldithiocarbamoyl-arsin,

residues, fruit, strawberry 2704

triarylmal

fruit, russetting, apple 1747

injury, fruit russetting, apple 1747

ozone injury, prevention, bean

(*Phaseolus*) 1211

respiration, enzyme activity, apple

6578

triforine 4140

injury, cherry 8475

tolerance 4140

Trithion, fruit, flavour, blueberry 8499

Tuzet, persistence 1748

unspecified, yield increase, coffee 836

various

application, soil 3316

fruit

quality, apple, annual report, Canada

1719

russetting

apple 6560

annual report, German Federal

Republic 6505

tolerance, ornamental plants 2173

yield increases, coffee, annual report,

UK 2449

zineb

application

spreaders, bean (*Phaseolus*) 1215

surfactants, bean (*Phaseolus*) 1215

enzyme activity, inhibition, apricot

4952

injury

bean (*Phaseolus*) 1215

Fungicides contd.

zineb contd.

injury contd.

currants 4308

Panax ginseng 3052

respiration 4951

ziram

enzyme activity, inhibition, apricot

4952

respiration 4951

Fusarium equiseti, *Piper betle*, diseases

7118

F. gibbosum, incidence, melon (cantaloup

and musk) diseases 8653

F. martii

host-pathogen relationships, pea diseases

2055

toxins, pea diseases 2055

F. moniliforme

citrus diseases 369

Dracaena spp., diseases 8924

fig diseases 8450

mango diseases 4065

Mexico, sugar cane diseases 6440

nerine diseases, annual report,

Netherlands 6127

Piper betle, diseases 7118

f. subglutinans, control, nerine diseases

5433

F. nivale

control, lawns and sports turf, diseases

8918

lawns and sports turf, diseases 1371,

2971, 6195

F. oxysporum

Aconitum napellus, diseases 3963

Aechmea spp., diseases 4673

f. albedinis, date diseases, book 9109

f. asparagi, asparagus diseases, annual

report, Netherlands 6772

asparagus diseases 659

bulbs, diseases 3864

cacti, diseases 2267

f. callistephi, varietal resistance, aster,

china, diseases 2212

carnation diseases 716

annual report, Netherlands 6126, 6961

chicory diseases 7622

f. chrysanthemi, varietal resistance,

chrysanthemum diseases 8862

citrus diseases 369

f. conglutinans, interaction, turnip mosaic,

cabbage, chinese, diseases 8621

control

cacti, diseases 8921

hop diseases 7091

lily diseases 7902

pyracantha diseases 7963

f. corianderii, incidence, coriander diseases

8981

corm storage, growth substance treatment,

gladiolus diseases 2239

f. cubense, incidence, banana diseases

5604

f. cumini, cumin diseases 3937

cyclamen diseases 3866

f. dianthi

carnation diseases 5400

histology, carnation diseases 4620

f. elaeidis, resistance, breeding and

selection, oil palm diseases 8164

enzyme, content, pea diseases 8718

ethylene, production, tulip diseases 3880

freesia diseases, annual report,

Netherlands 6126

f. gladioli

corm production, gladiolus diseases

1358

cormel production, gladiolus diseases

1358

detection, in corms, gladiolus diseases

7900

herbicides, sugar cane diseases 5652

incidence, melon (cantaloup and musk)

diseases 8653

f. lycopersici

control, tomato diseases 6086, 8482,

8779

greenhouse disinfection, tomato diseases

7795

host enzyme activity, tomato diseases

6084-6085, 7796

Fusarium oxysporum* contd.**f. lycopersici* contd.**

- host-pathogen relationships
- growth substances, tomato diseases 3815
- phenols, production, tomato diseases 2120
- host phenols, content, tomato diseases 3805
- infection studies, tomato diseases 6918
- mulching, tomato diseases 4570
- resistance, tomato diseases 2111, 4571-4572, 7797
- soil, fumigation, tomato diseases 4570
- soil fumigation, tomato diseases 7795
- soil sterilization, tomato diseases 7795
- tolerance, tomato diseases 7797
- tomato diseases 6919
- annual report, Netherlands 6772
- varietal resistance, tomato diseases 2860, 3792, 6057-6058

f. melonis

- control, soil treatment, melon (cantaloup and musk) diseases 8654
- host enzyme activity, melon (cantaloup and musk) diseases 5953
- melon (cantaloup and musk) diseases 5965
- varietal resistance, melon (cantaloup and musk) diseases 6806

***narcissus* diseases, annual report,**

- Netherlands 2219

f. niveum

- soil, inoculum, watermelon diseases 2771
- varietal resistance, watermelon diseases 6805

f. passiflorae*, resistance, breeding and selection, passion fruit diseases, annual report, Australia 4782*pathogenicity tests**

- oil palm diseases, annual report, Nigeria 9181
- pyracantha diseases 7963

Piper betle*, diseases 7118**f. pisi***

- assessment methods, pea diseases 5165
- infection process, pea diseases 6862
- pea diseases 2056
- annual report, UK 3611
- resistance, pea diseases, annual report, UK 3612
- root exudates, pea diseases 8719
- varietal resistance, pea diseases 6007, 6859

planting date, tulip diseases 2958**resistance, pea diseases, annual report, UK 5149****secondary invaders, pea diseases 6862****seed-borne, bean (*Phaseolus*) diseases 5982****seed treatment, onion diseases 6875****set treatment, onion diseases 6875****soil, fumigation, aster, china, diseases 2206****tomato diseases, annual report, Canada 2734*****f. tracheiphilum*, varietal resistance,**

- chrysanthemum diseases 8862
- tulip diseases 296

annual report, Netherlands 2219***f. tulipae*, tulip diseases, annual report, Netherlands 2219****varietal resistance, aster, china, diseases 6159*****f. vasinfectum*, resistance, capsicum diseases 5324*****F. redolens***

- asparagus diseases 659
- carnation diseases, annual report, Netherlands 6126, 6961

F. roseum

- asparagus diseases, annual report, Netherlands 6772
- banana diseases 1541
- biological control, *Pseudomonas* spp., carnation diseases 2922
- cucumber and gherkin diseases, annual report, USA 1130
- nematode complex, lawns and sports turf, diseases 6196
- secondary invaders, pea diseases 6862

Fusarium* contd.**F. semitectum*, marrow diseases 4456*****F. solani***

- bean (*Phaseolus*) diseases 5241
- citrus diseases 369
- coffee diseases 8151
- herbicides, sugar cane diseases 5652
- incidence, melon (cantaloup and musk) diseases 8653
- marrow diseases 4456
- mulberry diseases 2057
- Panax* spp., diseases 2057
- pea diseases 2057
- f. phaseoli*, soil compaction 181
- Piper betle*, diseases 7118
- secondary invaders, pea diseases 6862
- seed-borne, okra diseases 4528
- symptoms, bean (*Phaseolus*) diseases 7706

F. sporotrichiella*, strawberry diseases 5101**F. spp.***

- bromeliads, diseases, annual report, Netherlands 6126
- bulb treatment, tulip diseases 2259
- bulbs, diseases 6165
- cacao diseases, annual report, Venezuela 6391
- carnation diseases 714

Fusarium* spp., celery diseases 2144**F. spp.***

- celery diseases, annual report, USA 8585
- citrus diseases 5563
- coffee diseases, annual report, Kenya 3191
- control
- gladiolus diseases 7899
- hop diseases 6279
- pea diseases 5277
- corm treatment, gladiolus diseases 2241, 3868

F. spp.*, cucumber and gherkin diseases 621**F. spp.***

- cucumber and gherkin diseases, annual report, Belgium 5148
- epiphyte, pecan 2653
- fruit storage, apple diseases 4224
- geranium diseases 7864
- hop diseases, annual report, German Federal Republic 7064
- incidence

asparagus diseases 2079**tree fruits 6327****vegetables 6327****inoculation****yield increase****capsicum 6038****tomato 6038****lawns and sports turf diseases, annual report, USA 8839****leek diseases 661****lily diseases, annual report, USA 8834****melon (cantaloup and musk) diseases,****annual report, Cyprus 3604****narcissus diseases, annual report, UK 3834*****Panax ginseng*, diseases 3052****parsley diseases 3014****petunia diseases 722****resistance****breeding and selection, aster, China,****annual report, USA 6129****tomato diseases 2859****rootstock resistance, melon (cantaloup and musk) diseases, annual report,****Netherlands 1135****seed treatment****capsicum diseases 6899****coffee diseases 3193****eggplant diseases 6899****sett germination, sugar cane diseases 850****soil, micro-organisms, replanting,****grapevine 1105****storage rots, carrot 1308****symptoms, geranium diseases 8869****tomato diseases****annual report****Australia 5882****Irish Republic 1939****St. Lucia 8577****USA 4368****toxins****leaf anatomy, bean (*Phaseolus*) 4487****plant responses, tomato 5353*****Fusarium* spp. contd.****toxins contd.**

- transpiration, vegetables 4478
- varietal resistance
- asparagus diseases, annual report, Australia 5882
- chrysanthemum diseases 8862
- sugar cane diseases 850
- tomato diseases 675, 2858, 5337, 8765
- water potential, tomato diseases 6923
- watermelon, annual report, USA 4368
- yield reduction, dill diseases 8976

Fusicladium carpophilum**control, almond diseases 7328****stone fruits, diseases 7328*****Fusicladium effusum*****control, pecan diseases 5057, 7464****pecan diseases, annual report, USA 1706*****F. pyracanthae*, varietal resistance,*****Pyracantha* spp., diseases 2310*****Gagea* spp., tuliposides 8908*****Gaillardia* spp.****diseases, cucumber mosaic 4641****nematicidal principles 283****sapogenins 2942****seed, germination 725*****Galinsoga parviflora*****as weeds****cabbage 6795****vegetables 7648*****G. spp.*, as weeds, vegetables 7627*****Gallium*, toxicity, cucumber and gherkin 157*****Galphimia* spp.****pollen tube, growth 707****tissue culture, pollen 707*****Ganoderma lucidum*, coconut diseases 4053*****G. spp.*, coffee diseases 4057*****Gardenia*****acaricides, injury 7024****gum, composition, flavones 766****plant, composition, gum 766*****Gardenia* pests****annual report, USA 1441, 6129****mites, control 7024*****Gardenia* propagation, cuttings, media 3838*****Garlic*****annual report, Canada 2734****bibliography 8975****fungicides, -insecticide mixtures, responses 6023****growing, in greenhouses, pest damage 3757****insecticides, -fungicide mixtures, responses 6023****irrigation 5296-5297****saline water 4518****medicinal properties 5168****pectins, content, bulb skin 8745****planting, bulb, size 3756****sprouting 5297****weed control 660, 5295, 5680, 6021, 6030****annual report, New Zealand 5152*****Garlic bulb*****heat treatment 1690****skin****composition 1245****pectins 8745*****Garlic* diseases, *Penicillium corymbiferum* 1244*****Garlic* nutrition****boron 227****magnesium, requirements 4381****major elements, plant analysis 4381****minor elements, plant analysis 4381****molybdenum 227****nitrogen 5296-5297****requirements 4381****phosphorus, requirements 4381****potassium, requirements 4381****sulphur, requirements 4381****zinc 227, 6022*****Garlic* pests*****Aceria tulipae* 228, 3757*****Liriomyza langei* 5298*****Tetranychus telarius* 228*****Garlic* soil, salinity, irrigation 4518*****Garlic* varieties****French West Indies 5294****USSR 1942*****Gas, natural*****injury 5679**

- Gas, natural** *contd.*
injury *contd.*
prevention 5679
- Gascardia destructor**
citrus pests 6350
annual report, Australia 4782
- Gaultheria fragrantissima**, leaf, composition 7078
- Gaylussacia** spp., leaf, composition 5880
- Gazania** spp.
ground cover plants 710
weed control 710
- G. uniflora**, ground cover plants, growth retardants 6157
- Genista** spp., varieties, comparative trials, Netherlands 7050
- Geococcus coffeae**
calamondin pests, annual report, USA 2375
flowering plants, pests, annual report, USA 8834
- Geotrichum candidum**
irradiation, lemon diseases 2411
soil steaming, mushroom diseases 6956
- G. spp.**, storage dips, lemon diseases 6363
- Geotropic responses**, ethylene, pea 2059
- Geotropism**, root, cress 8636
- Geranium**
air pollution, sulphur dioxide, ethylene, injury 6132
annual report
Austria 265
Netherlands 6127
USA 3836, 8834
breeding and selection, plastid colour 6980
carbon dioxide, uptake, mechanism 2508
dwarfing
growth substances 7866, 8870–8871
ancymidol 6983
chlormequat 2194, 2196, 6983
annual report, UK 6128
essential oil
biosynthesis 4747
composition 5496, 5501, 7965, 7989
content 7989
flowering
growth substances 7866
6-benzylamino purines 2195
ethephon 2195
genetics 3843
- Geranium**, genetics 5407
- Geranium**
glucose, absorption, leaf discs 7865
ground cover plants 710
growing
under glass, heating, infra-red 4134
media, coal ash 8857
as pot plants, production 5390
from seed 2194
herbicides
responses 8852
toxicity
dicamba 2495
picloram 2495
photosynthesis, carbon dioxide uptake, mechanism 2508
physiology, annual report, USA 3835
respiration, leaf, cycloheximide 274
stomata
distribution 5406
movements
oxygen 2193
temperature 2192
water relations, lysimeters 4128
weed control 710, 2171, 2495, 8852
- Geranium diseases**
Fusarium spp. 7864
symptoms 8869
leaf curl 6149
Pseudomonas spp., symptoms 8869
Puccinia pelargonii-zonalis 2929
control 7848
fungal parasites 6982
heat treatment 8868
Rhizoctonia solani 7864
ring spot 3844
Verticillium albo-atrum 5409
symptoms 8869
V. dahliae 5409
virus, annual report, Netherlands 6961
wilt 336
- Geranium diseases** *contd.*
Xanthomonas pelargonii, infection process 5408
X. spp., symptoms 8869
- Geranium flower**
biology 7867
bud initiation, growth substances 2194
number, growth substances 8870
- Geranium growth substances**
branching
6-benzylamino purines 2195
ethephon 2195
TIBA 2195
dwarfing
aminozide 8871
ancymidol 6983, 7866
chlormequat 2194, 2196, 6983, 7866, 8870–8871
annual report, UK 6128
flower, number, chlormequat 8870
flower bud, initiation, chlormequat 2194
flowering
ancymidol 7866
chlormequat 7866
date
6-benzylamino purines 2195
ethephon 2195
leaf, colour, chlormequat 2196
respiration, cyclohexamide 274
responses
aminozide 6150
chlormequat 6150
retardants, review 7846
- Geranium leaf**, colour, growth substances, chlormequat 2196
- Geranium nutrition** 1325
fertilizers
liquid 6983
slow-release 6983
Reunion, annual report, France 754
- Geranium propagation**, cuttings, temperature 8867
- Geranium seed**
germination 6981
sowing, direct, annual report, Canada 8836
treatment, sulphuric acid 6981
- Geranium varieties**, bedding plants 7863
- Gerbera**
annual report, Netherlands 6127
breeding and selection
annual report, Italy 6960
clones 720
seedlings 720
tetraploids 1337
bromine, content, soil, fumigation, methyl bromide 5394
economics, Netherlands 2197
growing
media, Organit 3845, 6985
Netherlands 2198
peat 6984–6985
plant variation 724
- Gerbera diseases** 2200
Alternaria spp. 2200
Botrytis cinerea 2200
crown rot, annual report, USA 8834
Oidium erysipoides, f. *gerberae* 2200
Phyllosticta gerberae 2200
Phytophthora cryptogea 1338
annual report, German Federal Republic 6959
virus 2200
- Gerbera disorders** 2200
- Gerbera flower**, cut, fluorine injury, tap water 2913
- Gerbera nutrition** 2199
copper, annual report, Netherlands 6962
- Gerbera pests**, *Tetranychus* spp., annual report, Denmark 3298
- Gerbera propagation**, material, annual report, Canada 8836
- Gerbera seed**
germination, temperature 7868
treatment, colchicine, tetraploids 1337
- Gerbera soil**
composts, compared 3845
fumigation, methyl bromide, plant composition, bromine 5394
- German Democratic Republic**, vegetables, growing 5155
- German Federal Republic**
blackberry, growing 7504
capsicum, growing 4530
raspberry, growing 7506
strawberry, growing 7518
Geum urbanum, sugars 3078
- Ghana**
cacao, economics 6392
sugar cane, growing 4882
- Gibberella saubinetii**, symptoms, passion fruit diseases 9117
- Ginger**
annual report, Australia 755
essential oil
composition 7965
volatile constituents 3022
growing, as an intercrop, pineapple 9198
irradiation, gamma rays, post-harvest 4527
mulching 7076
planting
rhizome size 7982
spacing 7982
time 7075
research, India, review 7968
- Ginger nutrition**
iron, deficiency, symptoms 5492
nitrogen 7076
annual report, Sarawak 3933
deficiency, symptoms 5492
phosphorus, deficiency, symptoms 5492
potassium 7076
deficiency, symptoms 5492
- Ginkgo biloba**, trunk, stress distribution 8939
- Gisekia pharnaceoides**, plant, composition 1449
- Gladiolus**
Annual, British Gladiolus Society 5422
annual report
Austria 265
Netherlands 2219
USA 1441, 6129, 8834
breeding and selection
annual report
Canada 8836
Italy 6960
dormancy
breaking, temperature 291
estimation 4655
varietal differences 291
economics, USA 7004
enzyme activity
corm, dormancy 4655
cormel, dormancy 4655
determination 4655
flower 3851
flowering, corm storage, temperature 8892
fluorine, toxicity, cut flowers 7006
forcing 6165
herbicides, responses 8852
historical survey 4654
irradiation, gamma rays, mutation induction 6172
mutants, induction 6172
species, classification 4654
temperature, disease incidence, *Curvularia trifolii* 5423
tissue culture, shoot-tip, media 7005
transport, vacuum cooling 2164
weed control 2237, 5680, 6175, 8852
- Gladiolus corm**
development 5422
drying, flowering 8892
harvesting, time of 8892
production 1357
disease control 1358
flower harvesting, mechanical 2945
growth substances, ethephon 1358
storage, temperature, flowering 8892
treatment
fungicide and growth substance mixtures 2239
fungicides 2240, 3868
benomyl 7899
washing, disease control 7899
water content, flowering 8892
- Gladiolus cormel**
formation, growth substances 6174
production
disease control 1358
growth substances, ethephon 1358
treatment, fungicides 2240

Gladiolus diseases

- aster yellows, indicator plants 290
- Botrytis* spp., control 7899
- Curvularia* spp., corm treatment 2241
- C. trifolii*, incidence 5423
- Fusarium oxysporum*

- corm storage, growth substance treatment 2239

f. *gladioli*

- corm production 1358
- cormel production 1358
- detection, in corms 7900

F. spp.

- control 7899
- corm treatment 2241, 3868

Stromatinia gladioli, annual report,

- Netherlands 6961

Uromyces transversalis 3317

virus 2944

Gladiolus flower

cut

- economics 7004
- fluorine injury 7006
- opening, preservatives 7901
- packing, methods compared 7901
- preservatives 7006
- floret opening 7901
- harvesting, mechanical 2945

Gladiolus growth substances

corm

- splitting, ethephon 2239
- storage, ethephon 2239
- corm production, ethephon 1358

cormel

- formation
- abscisic acid 6174
- GA 6174
- kinetin 6174

- cormel production, ethephon 1358
- fungicides, efficiency, ethephon 2239

Gladiolus nutrition, plant analysis 2238**Gladiolus pests, *Macrosteles sexnotatus*,**

- mycoplasma, vectors 290

Gladiolus propagation, shoot-tip culture,

- media 7005

Gladiolus root, contraction, mechanism

- 289

Gladiolus seed

- composition 2943
- oil 2943

Gladiolus varieties 5422

- comparative trials, India 6173
- USSR 2157

***Glechoma hederacea*, as weeds, fruit trees**

- and plants 1712

G. spp., as weeds, fruit trees and plants

- 909

Glenea aluensis*, cacao pests** 2444G. lebehuerei*, cacao pests** 2444***Gliocladium* spp., soil, micro-organisms,**

- replanting, grapevine 1105

***Gliricidia maculata*, as shade plants, rubber**

- 9209

Gloeodes pomigena*, apple diseases** 1750Gloeosporium album***

- apple diseases 53, 990, 4985, 5006

- fruit dips, apple diseases 3433

G. ampelophagum

- control, grapevine diseases 6754

- grapevine diseases, annual report, India 2668

***G. amygdalinum*, resistance, almond**

- diseases, annual report, Tunisia 4944

G. elasticae*, *Ficus elastica*, diseases** 788G. fructigenum*, apple diseases** 5006***G. laeticolor*, control, peach diseases** 7448***Gloeosporium musarum*, banana diseases**

- 829, 1541, 1546, 4833

G. olivarium*, olive diseases** 3166G. perennans*, apple diseases** 5006**G. spp.**

- apple diseases 486
- annual report, UK 903, 8318
- clonal resistance, rubber diseases 7222
- control, apple diseases 8391
- epiphyte, pecan 2653
- fruit storage, apple diseases 1798, 5751
- post-harvest dips, apple diseases 5751
- resistance, currants 1048

Glomerella cingulata

- apple diseases 1748-1749, 1754, 4209

- Betula* spp., diseases 4209

- coffee diseases 3204

***Glomerella cingulata* contd.**

- control, peach diseases 7448

- Hoya* spp., diseases 2307

- incidence, coffee diseases 1575

- resistance, camellia diseases 2981

- varietal resistance, tomato diseases 2107

G. tucumanensis

- heat treatment, sugar cane diseases 8230

- varietal resistance

- screening method, sugar cane diseases

- 1636

- sugar cane diseases 8194

***Gloriosa* spp., annual report, Austria** 265**Glossary, common plant names, multilingual**

- 7030

Gloxinia

- annual report, Netherlands 6127

- growing

- peat, nutrition 8894

- as pot plants, production 5390

- light, intensity 6176

- potting composts

- types compared 2946

- plant nutrition 8893

Gloxinia flowering, date, growth substances

- 6176

Gloxinia growth substances

- dwarfing

- aminozide 6176

- ancymidol 6176

- flowering

- date

- aminozide 6176

- ancymidol 6176

- injury, ancymidol 6176

- leaf, chlorophyll, content, aminozide

- 6176

- retardants, Pydanon 2163

Gloxinia leaf, chlorophyll, content, growth

- substances, aminozide 6176

Gloxinia nutrition 2946

- nitrogen, annual report, Netherlands

- 6962

- NPK 8893-8894

***Glycine javanica*, as a cover crop, oil palm**

- 7209

Glycosides

- content

- bean (*Phaseolus*) 8705

- bean (*Vicia*) 8705

- flower, lily-of-the-valley 7914

- growth substances, tomato 8794

- leaf, lily-of-the-valley 7914

- nitrogen nutrition, tomato 8794

***Gnomonia erythrostoma*, control, apricot**

- diseases 6611

G. fructicola*, strawberry diseases** 4331Godetia* spp.**

- growing, as pot plants, annual report,

- Canada 8836

- taxonomy 266

***Gomidesia* spp., growing, tropical America**

- 377

Gooseberry

- annual report

- Irish Republic 1857

- Netherlands 6670

- UK 3515, 5076, 7489

- economics

- EEC 3343

- UK 3343

- enzyme activity, fruit 2683

- harvesting, mechanical 1046

- herbicides

- fruit, ascorbic acid content,

- chlorthiamid 1051

- residues, soil, chlorthiamid, dichlobenil

- 6542

- tolerance, annual report, UK 529

- irrigation, trickle 1046

- mulching, peat 4190

- photosynthesis, productivity, estimation

- 2681

- production and trade

- EEC 3343

- UK 3343

- respiration, fruit, ripening 2682

- weed control 6542

Gooseberry diseases

- Botrytis cinerea*, annual report,

- Netherlands 5073

Gooseberry diseases contd.

- Phytophthora cactorum*, incidence, annual report, German Federal Republic 6669

- Puccinia caricina*, annual report,

- Netherlands 5073

- Septoria* spp. 2679

- Sphaerotheca mors-uvae* 5731

Gooseberry disorders, marginal necrosis

- 2678

Gooseberry fruit

- ascorbic acid, content, herbicides 1051

- composition 101

- firmness, growth substances 3522

- flavour, growth substances 3522

- loosening

- growth substances 3522

- ethephon 5801

- pectins, content 2683

- respiration, ripening 2682

- ripening

- cations, content 2682

- organic acids, content 2682

- respiration 2682

Gooseberry growth substances, fruit,

- loosening, ethephon 3522, 5801

Gooseberry pests

- Aphis grossulariae* 5079

- Cryptomyzus ribis* 5079

- Eriosoma ulmi* 5079

- Hyperomyzus lactucae* 5079

- Pteronidea ribesii* 2680

- Zephodia convolutella*, biological control

- 7498

Gooseberry propagation

- cuttings

- shoot, position on source plant 6679

- time 6679

Gooseberry seed, composition 101**Gooseberry soil, management, methods**

- compared 7503

Gooseberry varieties

- comparative trials, USSR 528

- disorder incidence, marginal necrosis

- 2678

- USA, winterhardiness 3358

Gophers, control, sugar cane pests 9258**Grading**

- bulbs, annual report, Netherlands 2219

- computerized system

- quality, tomato, annual report,

- Netherlands 8581

- size, tomato, annual report, Netherlands

- 8581

- electronic, fruit, annual report,

- Netherlands 23

mechanical

- apple, annual report, UK 5752

- equipment, brussels sprouts 4434

- flowers

- annual report, Netherlands 1314

- economics, rose 749

- fruit 2511

Grafting *contd.*

- graft storage *contd.*
 - temperature
 - apple propagation 4181
 - grapevine 1094
 - walnut 96
 - walnut propagation 3513
 - graft treatment
 - fungicides, grapevine 7556
 - paraffin
 - apple 7340
 - grapevine 6724, 7556
 - height, cold resistance, apple 4180
 - mechanical
 - equipment
 - fruit trees and plants 4179
 - walnut 4293
 - grapevine 6724
 - methods
 - tropics
 - fruit trees and plants 875
 - ornamentals 875
 - winter hardness, apple 8352
 - methods compared, mango 3221, 5629
 - mutation induction, *Capsicum annuum*, on *Datura stramonium* 2839
 - on to roots of established plants, grapevine 565
 - rootstocks
 - anatomy, grapevine 6720
 - planting
 - spacing
 - apple 7349
 - pear 7349
 - storage, grapevine 7553
 - rootstocks treatment
 - fungicides, grapevine 7553
 - water, grapevine 7553
 - scions
 - anatomy, grapevine 6720
 - storage, grapevine 7553
 - treatment
 - growth substances
 - GA, pear 1833
 - IAA, pear 1833
 - leaf removal, mango propagation 3222
 - shoot-tip, virus-tested plants, citrus 794
 - side-
 - conifers 4688
 - mango propagation 3222
 - side cleft, cedar propagation 4687
 - union
 - anatomy
 - declining trees, avocado 5542
 - walnut propagation 5067
 - callus fusion
 - tissue culture
 - apple 3567
 - chestnut 3567
 - grapevine 3567
 - peach 3567
 - pear 3567
 - persimmon 3567
 - development, virus diseases, cherry propagation 999, 8437
 - incompatibility, detection, fruit trees and plants, propagation 6509
 - protection, apple 5714
 - vener
 - cashew 9146
 - mango 5629
 - whip-grafting, walnut propagation 3513
 - work studies, grapevine 4339
- Grapefruit**
- annual report
 - Cyprus 3980
 - USA 790-791
 - breeding and selection, frost resistance 3106
 - dwarfing
 - growth substances
 - aminozide 2400
 - limonene derivatives 2400
 - economics 1502
 - enzyme activity, carbon dioxide concentration 1505
 - essential oil
 - alcohol determination 6369
 - content, seed, sterols 1510
 - ethylene, production, fruit, storage 1505
 - frost, protection, temperature data 6335

Grapefruit *contd.*

- fungicides
 - residues
 - fruit
 - biphenyl 9107
 - phenylphenol 9107
 - growing
 - Mexico 9076
 - Mozambique 360
 - harvesting, time of, fruit composition 6366
 - interstocks, disease incidence 5559
 - irrigation
 - saline water, salts concentration 3122
 - sprinkler, damage 3122
 - nitrate, content, NPK nutrition 2384
 - as a pollinator, tanger 9102
 - pruning and training, methods compared 1476, 6341
 - rainfall
 - fruit
 - acidity 4815
 - maturity 4815
 - respiration, fruit, gamma rays 1504
 - storage
 - cold
 - fruit, composition 6366
 - hypobaric 8098
 - containers, ploid, chilling injury, prevention 8098
 - controlled atmosphere
 - chilling injury 1505
 - prevention 8098
 - fruit
 - composition 6366, 9104
 - enzyme activity 9104
 - flavour 9104
 - respiration 9104
 - disorders, coatings, fungicides 7152
 - rots, coatings 1506
 - temperature, disease incidence 1506
 - wax coatings, chilling injury, prevention 8098
 - temperature
 - fruit
 - peel thickness 5548
 - shape 5548
 - transport, pre-cooling, temperature, container- 4016
 - tree, thinning 6341
 - weed control 2382
- Grapefruit diseases**
- exocortis
 - incidence 5558
 - virus-free nucellar bud lines 9089
 - Fusarium* spp., incidence 6327
 - impietratura
 - Cyprus 5559
 - Italy 5559
 - Mycosphaerella citri* 3127
 - rootstock resistance 9092
 - M. spp.* 3132
 - Phytophthora citrophthora*, infection
 - source, irrigation water 9094
 - xyloporosis, virus-free nucellar budlines 9089
- Grapefruit disorders**
- low-temperature pitting 7152
 - pink pitting, annual report, USA 2375
 - storage spot 4812
- Grapefruit, fruit**
- acidity, rainfall 4815
 - alcohols, content, storage 9104
 - composition 5575, 7157
 - harvesting date 6366
 - degreening, growth substances, ethephon 2409
 - flavour, storage, controlled atmosphere 9104
 - folic acid 4816
 - hydrocarbons
 - biosynthesis 1497
 - determination 1497
 - maturity, rainfall 4815
 - peel
 - thickness
 - estimation 5579
 - temperature 5548
 - pigments, metabolism 4005
 - post-harvest treatment, gamma rays, respiration 1504
 - proteins, content 4941
 - quality, pruning and training 1476

Grapefruit, fruit *contd.*

- ripening, growth substances, GA 1502
 - shape
 - humidity 5548
 - measurement 5579
 - temperature 5548
 - size
 - measurement 5579
 - pruning and training 1476
 - rootstocks 6332
 - wax coatings 3154
 - injured fruit 3154
- Grapefruit growth substances**
- disease incidence, 2,4-D 1506
 - dwarfing
 - aminozide 2400
 - limonene derivatives 2400
 - fruit
 - degreening, ethephon 2409
 - ripening, GA 1502
- Grapefruit leaf**
- composition
 - mineral elements 1484
 - rootstocks 6332
 - nutrients, content, irrigation, saline water 3122
- Grapefruit nutrition**
- nitrogen
 - application
 - foliar 3993
 - time 3995
 - leaf analysis 2384
 - phosphorus
 - application, foliar 3993
 - leaf, composition 2384
 - potassium
 - application
 - foliar 3993
 - methods compared 798
 - deficiency 798
 - fruit, size 798
 - leaf, composition 2384
 - sources 798
- Grapefruit pests**
- Aonidiella aurantii*, resistance 3134
 - mites, biological control 366
- Grapefruit propagation**, nucellus, embryo, tissue culture 6333
- Grapefruit rootstocks**
- Citrus macrophylla* 8063
 - comparative trials, USA 6332, 8063
 - disease incidence, impietratura 5559
 - disease resistance, *Mycosphaerella citri* 9092
 - scion relationships, leaf, composition 1484
- Grapefruit seed**
- oil
 - composition 372
 - sterols 1510
- Grapefruit varieties**
- fruit, folic acid 4816
 - virus-free nucellar selections, comparative trials 9089
- Grapevine**
- acaricides, injury, tetradifon 7580
 - air pollution, lead, content, fruit 5837
 - amides, biosynthesis, translocation, root, plant nutrition 5868
 - amino acids
 - biosynthesis
 - fruit 7587
 - leaf 7587
 - translocation, root, plant nutrition 5868
 - content, chlorosis 6750
 - annual report
 - Australia 550, 4296
 - Belgium 3559
 - Canada 7488
 - Cyprus 3560
 - Czechoslovakia 6713
 - German Federal Republic 4298, 5072, 5094, 6669
 - India 2668
 - Italy 6714
 - Tunisia 3561
 - USA 1440, 5077-5078, 7490, 8525
 - Yugoslavia 3517
 - breeding and selection 554, 1893
 - disease resistance
 - Peronospora* spp. 4350
 - Plasmopara viticola* 5825

Grapevine contd.

- breeding and selection *contd.*
 - disease resistance *contd.*
 - Ucinula necator* 5825
 - fruit, transportability 7547
 - nutritional value 1894
 - pest resistance, *Phylloxera* spp. 5825, 7577
 - Razaki 8528
 - sex inheritance 5824
 - statistical design of trials 2706
 - winter hardiness 555
- calcium, content, disease incidence 1913
- carbohydrates
 - biosynthesis, propagation methods 1092
 - content
 - fruit, ripening 8573
 - seasonal variations 1929
 - metabolism, minor element nutrition 1113
 - translocation 1926
- catechols
 - degradation 5879
 - determination, fruit 5879
- cell sap
 - concentration
 - frost resistance 5110
 - irrigation requirements 6736
 - nutrient solution, concentration 6749
- chlorophyll, content, leaf, position 5864
- climate
 - disease incidence, *Ucinula necator* 5860
 - German Federal Republic 3562
- cover crops 1106, 7560
- disorder incidence, stalk necrosis 7560
- defoliation, growth substances, endogenous 7586
- dormancy 7584
- growth substances, endogenous 8568
- drought
 - resistance, evaluation techniques 6727
 - root, systems 6745
- earthing-up 6739
- uncovering, equipment 8540
- economics
 - insecticides, application, Italy 4153
 - mechanization, Switzerland 5104
- enzyme activity 1119
- frost resistance 5138
- fruit
 - growth substances, GA 1122
 - pH 1118
 - temperature 1118
- leaf
 - manganese nutrition 1111
 - plant nutrient status 5138
 - temperature 5138
 - water relations 5138
 - molybdenum nutrition 1112
 - propagation methods 1092
 - shoot, temperature 5138
- enzymes, determination, fruit 1118, 5146
- flooding, varietal tolerance 5848
- flowering
 - date
 - forecasting, temperature sums 2379
 - growth substances 7589
 - aminozide 4357
 - Italy 586
 - light 586
 - pruning and training 572
 - temperature 586
- frost
 - damaged plants, pruning and training 1098
 - injury
 - critical temperatures 4159
 - position on slope 5112
 - recovery 7559
 - slope orientation 5112
 - thawing rate 4342
 - protection
 - earthing-up 7559
 - earthing up, mechanical 3573
 - resistance
 - carbohydrates, content 1929
 - cell sap concentration 5110
 - enzyme activity 5138
 - proteins, content 1927

Grapevine contd.

- frost *contd.*
 - resistance *contd.*
 - protoplasmic properties, varietal differences 8539
 - pruning and training 5110
 - redox regime 3590
 - shoot temperature 5835
 - testing, electrical conductivity 6726
 - varieties 1098
 - water content 5111, 8566
- fruiting
 - date
 - forecasting, temperature sums 2379
 - temperature, India 1124
- fungicides 3320
 - application, methods compared, benomyl 1917
- fruit
 - acidity, RH 90 3579
 - set, bordeaux mixture 6755
- injury
 - chinosol 7553
 - dinocap 1914
 - mixtures, Foltapet 1116
- residues
 - determination, dichlozoline 6758
 - fruit
 - benomyl 1698
 - dichlozoline 6758
 - Foltapet 1116
 - Sclex 1924
 - yield increase, RH 90 3579
- genetics
 - flower, sex 5106
 - fruit, size 8527
- growing
 - Argentina 1707
 - Bulgaria 1079
 - German Federal Republic 113
 - in greenhouses, pollen viability 6762
 - India 1892
 - industrial-scale production, Hungary 4334
 - Italy 551, 1086
 - mechanization, Switzerland 5104
 - under plastic 1097
 - Europe 1099
 - Rhodesia 8526
 - Switzerland 2705
 - terraced slopes 6746
 - tropics 3569
 - USA, for wine 4335
 - Venezuela 8119
- growth
 - records, computer analysis 552
 - studies 585
 - growth rhythm 7584
 - growth-yield relationships 5120
- grubbing
 - arboricides
 - chloramp 581
 - Dianat 581
- hail
 - damage
 - prevention
 - leaf cover 5836
 - nets 8355
 - economics 8356
- harvesting
 - labour requirements, pruning and training 6743
 - mechanical 4359
 - economics 5144
 - fruit, storage, juice quality 595
 - peduncle length 1126, 1895
 - pneumatic suction 819
 - pruning and training 5143, 5845
 - review 6766
 - shakers 570, 819, 5143
- herbicides
 - application, methods compared, Oxadiazone 7561
 - injury 3570
 - aminotriazole 5839
 - atrazine 6735
 - chlorthiamid 6735
 - diuron 6735
 - simazine 5839
 - triazine 6733
 - tolerance
 - atrazine 5839
 - 2,4-D 5839

Grapevine contd.

- herbicides *contd.*
 - trifluralin 1902
 - yield increase, monlinuron 1902
- insecticides 3318
 - application, economics 4153
 - persistence, hexachlorobutodiene 2724
 - residues 3328
 - plant, dimethoate 5863
- intercropping 7560
 - strawberry 544
- irradiation, gamma rays, mutation induction 7545
- irrigation 6768
 - automatic 4344
 - fruit
 - composition 6737
 - quality 2714
 - furrow 1905, 3571
 - methods compared 3571
 - photosynthesis 4344
 - requirements
 - determination 6736
 - varietal differences 1925
 - root, growth 2714
 - soil, compaction 1106
 - spray 4344
 - sprinkler 3571
 - sub-surface 1905, 3571
 - transpiration, diurnal variations 6737
- lead, content, fruit, air pollution 5837
- light
 - intensity
 - fruit, sugars, content 564
 - photosynthesis 7325
 - pruning and training 5834
 - ultra-violet, pest resistance 7577
- magnesium, content, disease incidence 1913
- mulching 7560
 - straw 5847
- mutants 7545
 - induction 7545
- nitrogen
 - content
 - leaf, soilless culture 6749
 - plant, storage 5830
 - metabolism
 - molybdenum nutrition 1112
 - phosphorus 7581
 - nutrient absorption 1912
 - nitrogen nutrition 6747
 - phosphorus nutrition 6747
 - nutrients, content, nutrient solution, concentration 6749
- organic acids, determination, fruit 7593
- ozone, injury 6728
- phosphorus
 - absorption, nitrogen metabolism 5866
 - content, leaf, soilless culture 6749
 - metabolism, nitrogen 7581
- photoperiodism
 - growth substances, endogenous 6759
 - photosynthesis 2725
 - water relations 2725
- photosynthates
 - translocation 5865
 - growth substances 8567
- photosynthesis 2725, 5865, 7325
 - diurnal fluctuations 5864
 - irrigation 4344
 - manganese nutrition 1111
 - optimal leaf area 5823
 - osmotic pressure, nutrient solution, soilless culture 6749
 - propagation methods 1092
 - seasonal variations 5864
 - sunlight utilization 8565
- physiology, book 582
- planting
 - material, treatment, bactericides 7571
 - plant size 560
 - Siberia 563
 - spacing 6722, 6743, 7558, 8537
 - pruning and training 6743
 - root secretion, composition 7583
- pollen, viability 6762
- pollination
 - artificial 5142
 - cross- and self- compared 5142
 - polyploids, pollen, viability 6762
 - potassium, content, leaf, soilless culture 6749

Grapevine contd.

- proteins
 - biosynthesis
 - fruit 7587
 - leaf 7587
 - content
 - frost, resistance 1927
 - leaf, soilless culture 6749
- pruning and training 1102, 4345
- bud, break 568
- Casarsa system 1910
- cell sap concentration 5110
- chemical 1125
- climate, microclimate 1096
- economics 8546
- fan, shoots per plant 8544
- flowering, date 572
- frost, resistance 5110
- frost damaged plants 1098
- fruit
 - bunch
 - size 5120
 - weight 568, 572, 5843
 - composition 3574
 - ripening 572, 3574
 - size 5843
 - sugar content 572
- Guyot 6742
 - sugars, content 8550
 - varietal behaviour 5826
- labour requirements 571, 8546
- leaf, nutrients, content 2727
- light intensity 5834
- mechanical 3573, 6739
 - annual report, USA 3516
- mechanical harvesting 570, 4346, 5143
- methods compared 1101, 1103–1104, 1909, 2717–2718, 3575–3576, 4347–4348, 5117, 5844, 6741, 6765, 7562–7563, 8545, 8547–8548
- disease incidence 569
- palmette 5846
- pinching 5843
 - fruit, composition 2715
- recommendations 1926
- shoot direction 4353
- shoot length 8549
 - varietal behaviour 6740
- stem height, sugars, content 8550
- time of 6765
- tipping 5116
- trellis systems 6743
- two-armed cordon 6742
- varietal behaviour 2716, 3572, 4348, 8547
- vertical cordon 5845
- rainfall
 - fruit set, time from flowering 587
 - temperature, correlation, fruit yield 562
- regeneration, replanting compared 565
- replanting
 - regeneration compared 565
- soil
 - fumigation
 - fungus control 7573
 - nematode control 7573
 - micro-organisms 1105
- report, Australia 6712
- respiration
 - leaf
 - diurnal fluctuations 5864
 - plant nutrition 5138
 - seasonal variations 5864
 - temperature 5138
 - water relations 5138
 - nitrogen 7581
 - physiology 7581
 - root 5137, 5866, 7581
 - plant nutrition 5866
- ringing
 - flower bud
 - fruiting potential 3592
 - initiation 3592
 - fruit
 - bunch size 3593
 - ripening 3593
 - size 3593
- growth substances, endogenous 1928, 7586
- time of 8570

Grapevine contd.

- sap
 - amino acids, content, plant nutrition 6748
 - composition, plant nutrition 6761
- sap rise, rootstock-scion relationships 2726
- snow, cover, potential water reserve 8541
- soilless culture
 - nitrogen 5852
 - nutrient solution, concentration 6749
 - nutritional studies, equipment 5121
- spraying
 - equipment
 - duster 5135
 - low-volume 5136
 - mist blower 5135
 - types compared 7580
- staking
 - Lannea grandis* trees 6744
 - methods compared 6744
- stomata
 - number, varietal differences 6715
 - structure 8573
- sugars, content, shoot, water relations 5867
- sunlight, utilization, photosynthesis 8565
- temperature
 - bud break 583
 - fruit, acidity 1081, 6725
 - of fruit, environmental factors 7582
- fruit
 - pigments, biosynthesis 3595
 - ripening 6725
 - set, time from flowering 587
 - of fruit, transpiration 7582
 - of leaf
 - environmental factors 7582
 - transpiration 7582
 - under plastic covers 1097
 - rainfall, correlation, fruit yield 562
 - sums 557
- terraces, construction 5832–5833
- tissue culture
 - callus, grafting compatibility studies 3567
 - meristem, virus-free plants 7554
 - shoot 1930, 2552
 - shoot-tip, virus-free plants 7554
- transpiration
 - diurnal variations, irrigation 6737
 - temperature of fruit 7582
 - temperature of leaf 7582
 - virus infection 2722
 - water use efficiency, varietal differences 1925
- water, supply, snow cover 8541
- water relations 2725
 - osmotic pressure, nutrient solution, soilless culture 6749
 - shoot, sugars, content 5867
- weed control 452, 566, 1902–1904, 1906, 3570, 4343, 5113, 5680, 5839–5841, 6729, 6733–6735, 7560–7561, 8542
- Convolvulus* spp. 5838–5839, 6731–6732, 7561
- Cynodon* spp. 1100, 6731, 7561
- methods compared 5839, 6730, 6732, 8543
- Ranunculus* spp. 5839
- Stellaria* spp. 6730
- weeds, as ground cover plants 7560
- wind, protection, plastic films 1901
- winter hardiness, varietal differences 7551, 7559, 8539
- yield, rainfall, temperature, correlation 562
- zinc, toxicity 7567

Grapevine bud

- break
 - chilling 583
 - growth substances, GA 583
 - nodal position 556
 - pruning and training 568
- composition 594
- dormancy 7584
- position
 - fruiting potential 5119
 - shoot growth 5119

Grapevine diseases

- Agrobacterium tumefaciens*
 - host-pathogen relationships 5856–5857
 - varietal resistance 5857, 8557

Grapevine diseases contd.

- alfalfa mosaic 7570
- Armillaria mellea*, soil fumigation 7573
- Aspergillus amstelodami* 579
- A. fumigatus* 579
- A. violaceo-fuscus* 7574
- Australia 6518
- bacterial canker, USSR 5855
- book 1689
- Botryotinia fuckeliana*, control 8482
- Botrytis cinerea* 578–580, 1115, 1915, 1917, 2723, 3583, 7574
 - control 7575
 - growth substances 5129
 - graftwood storage 3568
 - pruning and training 6743
 - spore numbers 5858
 - storage diseases 1916
- Botrytis* spp. 3579, 8558
- Bratislava mosaic virus, Czechoslovakia 577
- Cercospora* spp., control 8559
- C. viticola*, pruning and training 569
- C. vitis* 5859
- Cladosporium* spp., spore numbers 5858
- Coniothyrium diploidiella*, rachis desiccation 1117
- court-noué, transpiration 2722
- decline
 - disease complex 6756
 - USA 5854
- Elinoë ampelina*, control 8559
- Elinoë ampelina*, pruning and training 569
- Erwinia vitivora*, planting material, treatment 7571
- fanleaf, vectors, control 5133
- fanleaf virus, Czechoslovakia 577
- fruit rots, rainfall 6768
- Gloeosporium ampelophagum*, control 6754
- grape stalk necrosis 2720–2721
- leaf curl, tissue culture, shoot-tip culture, heat treatment 7554
- leafroll virus, Czechoslovakia 577
- Leptosphaera* spp., spore numbers 5858
- mosaic, tissue culture, shoot-tip culture, heat treatment 7554
- Penicillium* spp. 579
- storage diseases 1916
- Peronospora* spp. 3579
 - fungicides, application, time, fruit set 6755
 - resistance, breeding and selection 4350
- Phomopsis viticola*, control 8560–8562
- Phyllosticta prunicola* 6657
- Phytophthora cinnamomi* 7576
- incidence, South Africa 5130
- Plasmopara* spp., spore numbers 5858
- P. viticola*
 - incidence, foliar nutrition, minor elements 7568
 - resistance, breeding and selection 5825
- Pseudopeziza tracheiphila* 5131
- Pythium* spp. 6756
- Rhacodiella vitis*
 - control 6757
 - graftwood storage 3568
- shoot necrosis virus, Czechoslovakia 577
- storage diseases, control 9106
- tomato ringspot, USA 5854
- Uncinula necator* 1914, 1918, 2723
 - control 7580, 8482
 - incidence, foliar nutrition, minor elements 7568
 - resistance, breeding and selection 5825
- Switzerland 5860
- varietal resistance 3584, 7546, 8563
- USA 5127
- various, varietal resistance 7551
- veinbanding virus, Czechoslovakia 577
- virus
 - colloquium 5853
 - German Federal Republic 3581
 - identification 3581
 - review 3582, 5128
- Xanthomonas vitis-viniferae*, India 7572
- yellow speckle virus 575
- yellow vein 8556

Grapevine disorders

- blossom-end rot, plant analysis 1913
- book 1689
- brown leaf 6728

Grapevine disorders contd.

- chlorosis 3580
 - amino acids 6750
 - iron nutrition 4947, 7569
 - lime-induced, rootstock resistance 1107
 - respiration 5137
 - soil index 1107
- coulure, control, growth substances 5125, 5872
- stalk atrophy, green manures 3577
- stalk desiccation
 - calcium nutrition 5126
 - magnesium nutrition 5126
- stalk necrosis, incidence, cover crops 7560
- storage scald 518
- Grapevine flower**
 - bud development 1120
 - bud distribution on canes 1124
 - growth substances 6760
 - bud fruiting potential
 - anatomical studies 2716
 - nodal position 3572
 - NPK nutrition 3578
 - pruning and training 3576, 5117
 - ringing 3592
 - bud initiation
 - boron nutrition 5122
 - nodal position 556
 - ringing 3592
 - varietal differences 1124
 - composition 594
 - development, growth substances 5141
 - drop, boron nutrition 5122
 - sex
 - growth substances 5869
 - inheritance 5824
- Grapevine fruit**
 - acidity
 - growth substances 8572
 - GA 3597
 - NAA 2731
 - potassium nutrition 1127
 - pruning and training 1102, 5116
 - temperature 1081, 6725
 - anatomy 8573
 - berry, thinning 590
 - bunch
 - number, growth substances, chlormequat 6764
 - shape 6767
 - growth substances 2729
 - chlormequat 4356
 - GA 4356
 - ringing 8570
 - size
 - calcium nutrition 593
 - growth substances 5872-5873, 8574
 - aminozide 3591
 - chlormequat 6764
 - endogenous, cytokinin 5140
 - GA 593, 3591, 3593
 - pruning and training 5117, 5843-5844
 - ringing 3593, 8570
 - shoot growth 5120
 - thinning, fruit, size 589
 - weight, pruning and training 568, 572
 - bunch size, nitrogen nutrition 8552
 - carbohydrates 8573
 - content 7595
 - metabolism, growth substances, GA 3596
 - catechols 5879
 - colour, seed abortion 5870
 - composition 594
 - analysis methods, wine 597
 - enzymes 1118
 - growth substances 2731, 5871
 - aminozide 4355
 - GA 3597
 - NAA 2731
 - irrigation 6737
 - pruning and training 2715, 3574
 - ringing 8570
 - seasonal variations 5877
 - cracking
 - growth substances 5871
 - rainfall 6768
 - damage
 - rainfall 6768
 - storage, methods compared 596

Grapevine fruit contd.

- development 1120
 - growth substances 5141
 - time, climatic factors 591
 - varietal differences 6763
- drop 8555
 - growth substances, GA 3594
- flavonols, determination 5875
- iron, content 3580
- lead, determination 1128
- leaf, relationships 1926
- loosening, growth substances, GA, NAA 2731
- maturity, growth substances, GA, NAA 2731
- morphology, varietal differences 6763
- number, growth substances, GA 3593
- number per bunch, growth substances 5871
- nutrients, content 7595
- nutritional value
 - organic acids 1894
 - sugars 1894
 - vitamins 1894
- organic acids
 - content
 - irrigation 6737
 - ripening 7592
 - seasonal variations 6522
 - determination 7593
- packing
 - container, depth 596
 - containers, types compared 7590
- parthenocarp
 - growth substances 7589, 8574
 - GA 3594
- peduncle, length, mechanical harvesting 1126
- phenolic compounds
 - content, varietal differences 3601
 - determination 7594
 - fruit ripening 3600
- phenols, content 1931
- phosphorus, content, iron nutrition 3580
- pigments 5691
 - biosynthesis, temperature 3595
- processing, freezing, varietal behaviour 3598
- proteins
 - content 7595
 - determination 4360
- quality
 - growth substances 8575
 - irrigation 2714
 - nitrogen nutrition 8552
 - pruning and training 1102, 8550
- ripening
 - carbohydrates 8573
 - fruit composition 5878
 - growth substances 8572, 8574
 - aminozide 4357
 - endogenous 7586
 - GA 3593, 5870
 - organic acids, content 7592
 - phenolic compounds 3600
 - pruning and training 572, 3574
 - ringing 3593
 - root, composition 1123
 - sugars, content 7592
 - temperature 6725
- sampling, methods, wine 597
- set
 - fungicides, application time 6755
 - growth substances 4356, 5141
 - aminozide 2730, 4355
 - chlormequat 6764
 - endogenous 7586
 - light intensity 4353, 5836
 - pollination 5142
 - pruning and training 4353
 - time from flowering
 - rainfall 587
 - temperature 587
 - varietal differences, Italy 587
- shape 6767
 - growth substances 2729
 - GA 3594
- size
 - bunch, thinning • 589
 - genetic studies 8527
 - growth substances 2729, 4356, 5872-5873, 7589, 8575
 - aminozide 3591, 4355, 4357

Grapevine fruit contd.

- size contd.
 - growth substances contd.
 - GA 1122, 3591, 3593, 3596, 4354
 - pruning and training 5117, 5843
 - ringing 3593, 8570
- skin, composition 7595
- stem, phenols, content 1931
- storage
 - alcohol, production, sulphur dioxide, treatment 595
 - container, depth, sulphur dioxide, treatment 596
 - containers, liners 3599
 - diseases, control 9106
 - harvesting, mechanical, juice quality 595
 - juice composition 1129
 - methods compared 7590
 - pre-cooling 5145
 - sulphur dioxide 7426
 - application
 - container generators 3599
 - potassium metabisulphite 595
 - injury 1916
 - treatment 596
 - varietal behaviour 5874
 - volatile acids, production, sulphur dioxide, treatment 595
- sugars
 - content 1103
 - boron nutrition 5122
 - fruit, ripening 5878
 - growth substances 5872, 8572
 - chlormequat 2727, 6764
 - iodine nutrition 8553
 - iron nutrition 3580
 - irrigation 6737
 - light, intensity 564
 - phosphorus nutrition 7565
 - pruning 5117, 5844, 7563, 8545
 - pruning and training 572, 1101-1102, 8550
 - ripening 7592
 - seasonal variations 6522
- sulphur dioxide, application, storage 7462
- thinning
 - growth substances, GA 588
 - time of 7588
- transport
 - chutes 4358
 - containers, refrigerated 7426
 - damage 7307
 - suitability, breeding and selection 7547
 - sulphur dioxide treatment 7307
- vitamins, content 1894
- volatile constituents, content, fruit, ripening 5878
- yeasts on surface 5876
- Grapevine growth substances**
 - bud break, GA 583
 - carbohydrates, metabolism, GA 3596
 - disease control, chlormequat 5129
 - disorder control, chlormequat 5125
 - disorder incidence, chlormequat 5872
 - endogenous
 - cuttings, translocation 1091
 - defoliation 7586
 - fruit 592
 - ripening 7586
 - set 7586
 - plant
 - dormancy 8568
 - photoperiodism 6759
 - seasonal variations 8568
 - ringing 1928, 7586
 - sap 5140
 - shoot 1121
 - enzyme activity, GA 1122
 - flower
 - development
 - adenine sulphate 5141
 - BA 5141
 - sex, cytokinin 5869
 - flower bud
 - distribution, chlormequat 6760
 - number, chlormequat 6760
 - flowering
 - date
 - aminozide 4357
 - GA 7589

Grapevine growth substances contd.

- fruit
 - acidity
 - GA 2731, 3597, 8572
 - NAA 2731
 - bunch number, chlormequat 6764
 - bunch shape
 - chlormequat 4356, 5872
 - GA 2729, 4356
 - bunch size
 - aminozide 3591
 - chlormequat 6764
 - GA 593, 3591, 3593, 5873, 8574
 - composition
 - aminozide 4355
 - chlormequat 2727, 5871
 - GA 2731, 3597, 5871
 - NAA 2731
 - cracking, GA, chlormequat 5871
 - development
 - adenine sulphate 5141
 - BA 5141
 - drop, GA 3594
 - growth, GA 592
 - loosening
 - GA 2731
 - NAA 2731
 - maturity
 - GA 2731
 - NAA 2731
 - number, GA 3593
 - number per bunch
 - chlormequat 5871
 - GA 5871
 - parthenocarp, GA 3594, 7589, 8574
 - quality, aminozide 8575
 - ripening
 - aminozide 4357
 - GA 3593, 5870, 8572, 8574
 - set
 - adenine sulphate 5141
 - aminozide 2730, 4355
 - BA 5141
 - chlormequat 4356, 6764
 - GA 4356
 - shape, GA 2729, 3594
 - size
 - aminozide 3591, 4355, 4357, 8575
 - chlormequat 4356, 5872
 - GA 1122, 2729, 3591, 3593, 4354, 4356, 5873, 7589
 - sugars, content, chlormequat 5872, 6764
 - thinning, GA 588
 - fruiting, GA 593
 - growth reduction
 - aminozide 4355
 - chlormequat 5872, 6760
 - injury
 - aminozide 8575
 - GA 2732
 - interaction, applied and endogenous 592
 - internode length, chlormequat 1125
 - leaf
 - carbohydrates content
 - aminozide 8569
 - chlormequat 8569
 - MH 8569
 - Phosfon D 8569
 - TIBA 8569
 - chlorophyll, content, chlormequat 1125
 - nutrients content
 - aminozide 8569
 - chlormequat 2727, 8569
 - MH 8569
 - Phosfon D 8569
 - TIBA 8569
 - size, chlormequat 1125
 - phloem, formation, GA 4354
 - photosynthates, translocations, BA 8567
 - proteins, biosynthesis, inhibition, chloramphenicol 1927
 - responses, chlormequat, review 8310
 - rooting, IBA 2713
 - seed
 - germination, inhibition, GA 3566
 - treatment, GA 3566
 - shoot
 - growth
 - aminozide 2730, 4357
 - chlormequat 6764

Grapevine leaf

- area 5118
 - measurement 4349
 - photosynthesis 5823
 - plant, dry matter accumulation 7585
 - calcium, contents, zinc nutrition 1912
 - carbohydrates, content, growth substances 8569
 - chlorophyll
 - content
 - growth substances, chlormequat 1125
 - iron nutrition 3580
 - copper
 - content, phosphorus nutrition 6751
 - seasonal variations 6752
 - development 5118
 - fall
 - copper content 6752
 - phosphorus nutrition 6751
 - fruit relationships 1926
 - iron, contents, zinc nutrition 1912
 - metabolism, pest incidence, *Phylloxera vastatrix* 7579
 - nitrogen, seasonal variations 6752
 - nutrients
 - content
 - growth substances 8569
 - chlormequat 2727
 - pruning and training 2727
 - phosphorus
 - contents, zinc nutrition 1912
 - seasonal variations 6752
 - removal, plant metabolism 7585
 - size, growth substances, chlormequat 1125
 - suction pressure, irrigation requirements 6736
 - temperature, photosynthesis 7325
- Grapevine nutrition 1114**
- aluminium, toxicity 576
 - boron 593
 - carbohydrates, metabolism 1113
 - enzyme activity 5138
 - flower, drop 5122
 - flower bud, initiation 5122
 - plant, anatomy 5105
 - respiration 5138
 - sugars, content 5122
 - calcium
 - disorder incidence, stalk desiccation 5126
 - fruit, bunch size 593
 - leaf analysis, petiole analysis compared 8551
 - petiole analysis, leaf analysis compared 8551
 - copper, toxicity 6753
 - economics 5851
 - fertilizers 3577
 - amides, biosynthesis, translocation 5868
 - amino acids, biosynthesis, translocation 5868
 - FYM 3577
 - general
 - deficiency, diagnosis 1114
 - plant analysis, blossom-end rot 1913
 - green manures 3577
 - iodine
 - fruit, sugars, content 8553
 - iron absorption 8553
 - shoot, sugars, content 8553
 - iron
 - absorption, iodine nutrition 8553
 - application
 - foliar 3580
 - methods compared 7569
 - chlorosis 4947, 7569
 - sources, compared 3580
 - magnesium
 - disorder incidence, stalk desiccation 5126
 - leaf analysis, petiole analysis compared 8551
 - petiole analysis, leaf analysis compared 8551
 - requirements 5849
 - major elements 1108, 2719
 - leaf analysis 1108
 - soil analysis 1108
 - manganese 5124
 - carbohydrates, metabolism 1113

Grapevine nutrition contd.

- manganese contd.
 - enzyme activity 1111, 5138
 - photosynthesis 1111
 - plant, anatomy 5105
 - respiration 5138
 - minor elements 1108, 2719
 - application, foliar 7568
 - leaf analysis 1108
 - soil analysis 1108
 - molybdenum, nitrogen metabolism 1112
 - nitrogen 3579, 6747, 7565
 - application, foliar 8552
 - flower bud, fruiting potential 3578
 - fruit
 - bunch size 8552
 - quality 8552
 - leaf analysis, petiole analysis compared 8551
 - petiole analysis, leaf analysis compared 8551
 - soilless culture 5852
 - sources, urea 8552
 - NPK 1109-1110, 5850
 - sap
 - amino acids, content 6748
 - composition 6761
 - nutrients, content 6748
 - Nutrifix 573
 - organic fertilizers 5850
 - phosphorus 6747, 7565
 - copper content 6751
 - copper toxicity 6753
 - flower bud, fruiting potential 3578
 - leaf, fall 6751
 - leaf analysis, petiole analysis compared 8551
 - petiole analysis, leaf analysis compared 8551
 - plant analysis 7566
 - requirements 5849
 - sources, compared 7566
 - potassium 7565
 - deficiency 864
 - flower bud, fruiting potential 3578
 - fruit, acidity 1127
 - leaf analysis, petiole analysis compared 8551
 - petiole analysis, leaf analysis compared 8551
 - requirements 5849
 - town compost 1911
 - trace elements, soilless culture, equipment 5121
 - zinc
 - application, foliar 1912
 - carbohydrates, metabolism 1113
 - plant, anatomy 5105
- Grapevine pests**
- Argyrotaenia pulchellana* 580
 - Australia 6518
 - birds 3589
 - Desmia funeralis* 1922
 - biological control 1922
 - Empoasca flavescens* 3587
 - Eotetranychus willamettei* 1920
 - predator-prey relationships 1920
 - Eriophyes vitis* 5134
 - Erythroneura zizac*
 - parasites, *Anagrus epos* 5861
 - varietal resistance 5861
 - Eupoecilia ambigua* 4351
 - Hemicricnemoides chitwoodi*
 - hosts 5132
 - incidence 5132
 - integrated control 4350
 - Lobesia botrana* 4351
 - Macroposthonia xenoplax* 1919
 - Meloidogyne incognita*, soil fumigation 7573
 - mites, biological control 29
 - nematodes, rootstock resistance 8534
 - Oligonychus mangiferus* 3585
 - Otiorrhynchus asphaltnus* 1923
 - Panonychus ulmi*, population studies, fungicides 3586
 - Phylloxera* spp.
 - arboricides 581
 - control 7578
 - cultural methods 6723
 - host cytology 8564
 - resistance 7577
 - breeding and selection 5825

Grapevine pests contd.

- Phylloxera* spp. contd.
 rootstock resistance 6721
 varietal resistance 8564
- P. vastatrix*
 book, historical 574
 leaf metabolism 7579
- P. vitifoliae* 2724
 integrated control 1921
 population survey, South Africa 4352
 predators, *Trombidium* spp. 1921
 resistance 2728
- Prodecatoma cooki* 3588
Pseudococcus maritimus 5862
 review, Bolivia 5671
Tetranychus pacificus 1920
 predator-prey relationships 1920
T. telarius, control 7580
 USA 5127
- Xiphinema index*
 soil fumigation 7573
 vectors, fanleaf 5133
- Grapevine plant**
 anatomy, nutrition 5105
 storage
 cold, nitrogen, content 5830
 plastic bags, nitrogen, content 5830
 sand, nitrogen, content 5830
- Grapevine propagation**
 annual report, Canada 2669
 budding
 bud wood, position on source plant 1093
 height 1093
 cuttings 561, 563
 growing rooms 5139
 nutrition
 aluminium toxicity 576
 boron 5123
 pest control 6723
 physiology 1092
 in plastic sleeves 6723
 polarity 1091
 shoot
 carbohydrates content 6719
 nitrogen content 6719
 part 1089
 source plants
 defoliation
 root formation 1090
 shoot formation 1090
 side shoot removal
 root formation 1090
 shoot formation 1090
 storage 561, 1900
 under plastic 1087
 time 1089
 treatment
 boron 5123
 growth substances 2713
 IAA 1091, 1899-1900
 paraffin 7555
 stratification 1899
- grafting 563
 bench grafting, stratification units 8533
 bench grafts
 planting, methods compared 6724
 root formation 5831
 graft storage
 fungicide treatment 3568, 7553
 temperature 1094
 graft treatment
 fungicides 7556
 paraffin 6724, 7556
 growing rooms 5139
 mechanical 6724
 methods compared 1092
 physiology 1092
 on to roots of established plants 565
 rootstocks
 anatomy 6720
 storage 7553
 rootstocks treatment
 fungicides 7553
 water 7553
 scions
 anatomy 6720
 storage 7553
 scions treatment
 fungicides 7553
 water 7553
 work studies 4339

Grapevine propagation contd.

- nurseries
 economics 553
 labour requirements 553
 shoot, storage, growth substances, activity 1121
 shoot-tip culture 8536
 virus-free plants 7554
- Grapevine root**
 anatomy, growth studies 7544
 development, soil cultivation 6738
 growth
 anatomical studies 7544
 inhibition, zinc 7567
 irrigation 2714
 seasonal variations 5114
 soil, cultivation depth 5114, 5842
 nitrogen
 content
 fruit ripening 1123
 zinc nutrition 1912
 respiration 5137
 secretion, composition 7583
 -shoot relationships, growth studies 7564
 systems 6745, 7564
 pest control, *Phylloxera* spp. 6723
- Grapevine rootstocks**
 Berlandieri × Riparia Kober 5BB 6716
 Chasselas × Berlandieri 41B 6716
 chlorosis resistance 1107
 comparative trials 6745, 7557, 8535
 Israel 4341
 South Africa 4340
 disease incidence
Phytophthora cinnamomi 5130
Uncinula necator 5860
 disease resistance, *Phytophthora cinnamomi* 7576
 nematode resistance 8534
 own-rooted plants compared 4341
 pest resistance, *Phylloxera* spp. 6721
 propagation, cuttings, root formation at internodes 5831
 -scion relationships 4341
 carbohydrates, metabolism 1113
 growth substances, activity 5140
 incompatibility 6745
 pollen, viability 6762
 sap rise 2726
 shoot, growth 6743
 soil fumigation 8534
Vitis berlandieri, hybrids 1095
V. champini, varieties 1095
- Grapevine seed**
 abortion 5870
 development 1120
 dormancy, breaking 6718
 germination 1088
 inhibition, growth substances, GA 3566
 number per fruit, fruit ripening 5870
 phenols, content 1931
 treatment
 cold 3566
 growth substances 6718
 GA 3566
 running water 6718
 stratification 3566, 6718
- Grapevine shoot**
 amino acids, content 1112
 anatomy, growth studies 7544
 bud fruiting potential 8571
 pruning and training 8545
 carbohydrates
 content, minor element nutrition 1113
 metabolism, minor element nutrition 1113
 flower bud distribution 567
 growth
 anatomical studies 7544
 bud position 5119
 temperature 584
 length
 light intensity 4353
 pruning and training 4353
 sugars, content, iodine nutrition 8553
 temperature, fluctuations, frost resistance 5835
 water content
 frost resistance 5111, 8566
 seasonal variations 8566

Grapevine soil

- amendments
 compost 5847
 gypsum 1106
 peat compost 5850
 wood chips 1106
- cultivation
 depth 5842
 root growth 5114
 hoeing machine 1907
 machines 1908
 methods compared 5115, 6738
 erosion 6733
 herbicide-contaminated soil 6733
 fumigation
Armillaria mellea
 chloropicrin 7573
 1,3-D 7573
 methyl bromide 7573
Meloidogyne incognita
 chloropicrin 7573
 1,3-D 7573
 methyl bromide 7573
 nematode control
 carbon disulphide 8534
 1,3-D 8534
 methyl bromide 8534
Xiphinema index
 chloropicrin 7573
 1,3-D 5133, 7573
 methyl bromide 5133, 7573
 management, methods compared 1906, 7560
 micro-organisms, replanting 1105
 moisture
 soil management 5848
 varietal behaviour 5848
 removal, equipment 8540
 salinity, plant tolerance 8554
- Grapevine varieties**
 Aligoté 6722
 Australia 8531
 Bacchus 1080
 Blaufränkisch, rootstock relationships 7557
 B'lgariya 1896
 Bolgar, abnormal fruits 6767
 Bruni 485 4338
 Cabernet Sauvignon 6722
 clonal variation 2711
 Cayuga White 5108, 7551
 Champagne 558
 comparative studies, USSR 7548
 comparative trials
 Bulgaria 2708, 6716
 USA 2709
 Convent Large White 559
 Delaware, variant strain 8574
 dessert 5107, 5828, 8531
 disease resistance 1932, 7551
Agrobacterium tumefaciens 5857, 8557
Uncinula necator 3584, 7546, 8563
 early harvesting 8530
 Ehrenfelser 1080
 Faber 1080
 flowering, date, Italy 586
 Forta 1080
 Freisamer 1080
 frost resistance 1098, 5111
 protoplasmic properties 8539
 fruit
 development 6763
 development time 591
 morphology 6763
 phenolic compounds, content 3601
 set, time from flowering, Italy 587
 Fry 3564
 Germany 1080
 Golden City 3565
 Goruli Mtsvane 4336
 Greece 8530
 growth substances, responses 3591
 identification
 leaves, nursery 7550
 shoots, nursery 7550, 8532
 India 2707, 5827
 Italy 1086, 4337
 Jakaranda 3565
 Jumbo 3564
 Kanzler 1080
 Karaburnu 4345
 Kerner 1080
 Lakemont 5829, 7551

Grapevine varieties *contd.*

- Maï 2712
- male sterile 3563
- Mariensteiner 1080
- Misket Plevenski 6717
- Noble 1898
- Nobling 1080
- Optima 1080
- peduncle length, mechanical harvesting 1126, 1895
- pest resistance 1932
 - Erythroneura ziczac* 5861
 - Phylloxera* spp. 7577, 8564
- Plovdiv 2 7552
- Pride 1085, 3564
- processing, freezing 3598
- pruning and training 2716, 3572, 5826, 8547
- Rabaner 1080
- Razaki, selection 8528
- register, USA 3356, 4156
- Rizling B"lgarski 1082
- Rumania 8538
- Sauvignon Vert 5848
- St. Laurent, pruning and training 2717
- stomata, number 6715
- storage behaviour 5874
- Suffolk Red 5829, 7551
- Switzerland 2710
- Trakiiski Biser 1082
- Trakiya 1897
- Tunisia 4155
- USSR 1893
- Vernatsch, clonal selection 8529
- Voivodinovo 1084
- Voivodinovo 2 5109
- wine 557, 4336-4337, 4361, 5108, 5826, 7549
 - Bulgaria 1083
 - fruit, composition 1081
 - proteins 7591
 - USA 4335
- winter hardiness 7551, 7559
 - USA 3358

Graphium spp., epiphytes, apple 955*Graphognathus* spp. 19*Grapholitha funebrana*

- biological control, plum pests 6660
- plum pests 6660

G. molesta, control, peach pests 7448**Grasses**

- as weeds
- tomato 6069
- vegetables 1946

Green manures

- apple nutrition 936
- Crotalaria* spp., sugar cane 8215
- frost resistance, apple 6538
- fruit, size, apple 6550
- irrigation, cabbage 1165
- lupin, apple 8374
- mustard, apple 8374
- pear nutrition 936
- root, growth, apple 1739
- rose 6267
- trunk, girth, apple 6550
- types compared, vegetables 5889

Greenhouse

- age, survey, Norway 4133
- air
 - conditioning
 - control, light-dependent 5683
 - equipment 442
- pollution
 - heating fuels 7296
 - supplementary carbon dioxide production 7296
- bench, design, pot plants 2169
- carbon dioxide
 - supplementary
 - control systems 886
 - natural gas burners 1688
 - production, ethylene pollution 8304
- climate
 - control 1974, 2497
 - annual report
 - Italy 6960
 - Netherlands 5, 7285
 - automation, annual report, Netherlands 5
 - electric 883
 - mathematical model 7294
 - symposium 3296

Greenhouse *contd.*

- climate *contd.*
 - vegetables, annual report, UK 6774
- construction
 - concrete specifications 8301
 - dimensions
 - ornamental plants 8300
 - vegetables 8300
 - foundation specifications 8301
 - metal corrosion 4926
 - metal specification 4926
 - timber specifications 8301
- control systems
 - carbon dioxide, supplementary 886
 - symposium 3296
- covering, plastic, annual report, UK 2487
- design 442
 - annual report, Netherlands 5
 - for seedling production 6493
- disinfection, formaldehyde, disease incidence, *Fusarium oxysporum*, f. *lycopersici* 7795
- equipment, soil, temperature, tomato 678
- glass
 - cleaning
 - annual report
 - Netherlands 5
 - UK 2487
 - handling produce, annual report, UK 2487
 - heat loss, comparative studies, annual report, Irish Republic 6482
 - heat retention, "Venlo" type 441
 - heating
 - infra-red 4134
 - systems
 - annual report, UK 2487
 - economics 1685
 - ethylene pollution 8304
 - tomato, annual report, UK 5884
- irrigation
 - control
 - automatic 4135
 - electric 883
 - Klimatair, climate, control 882
 - light
 - control, flowering, greenhouse crops 8841
 - economics, annual report, Netherlands 5
 - intensity, "Venlo" type 5799, 8303
 - supplementary, source, natural gas 2498
 - transmission 2499
 - annual report, UK 2487
 - orientation, tomato, annual report, UK 5884
 - plastic 6496
 - annual report, Austria 114
 - and conventional compared
 - annual report, Austria 265
 - lettuce 1686
 - light transmission 2499
 - strawberry 1686
 - designs, annual report, Netherlands 5
 - Finland 2738
 - fire incidents 6496
 - mushroom growing 8833
 - overwintering, nursery stock, annual report, Canada 8836
 - pneumatic 14-15
 - seedling raising, vegetables 5338
 - Sweden 2738
 - soil, sterilization, equipment 2488
 - solar radiation, review 7295
 - temperature
 - control
 - annual report, Belgium 4925
 - light-dependent 5683
 - "Venlo" type 8302
 - transport
 - annual report, Netherlands 5, 7285
 - conveyor belt, pot plants 6965
 - types
 - book 2497
 - tomato, annual report, UK 5884
 - types compared 3312
 - economics 1684
 - "Venlo" type 441
 - climate, control 6494
 - economics 1684
 - light intensity 5799, 8303

Greenhouse *contd.*

- "Venlo" type *contd.*
 - temperature 8302
- ventilation 3311
 - annual report, UK 2487
 - anthurium, annual report, Netherlands 704
 - ethylene pollution 8304
 - wind pressure on, annual report, UK 2487
- Greenhouse crops**
 - air pollution
 - plant responses
 - nitrogen dioxide 7296
 - olefines 7296
 - sulphur dioxide, ethylene, injury 6132
 - containers, high density planting, vegetables, annual report, Irish Republic 5150
 - ethylene, injury, prevention 8304
 - growing, mechanization 1974
 - irrigation, trickle 1046
 - light
 - intensity
 - photosynthesis 5683
 - respiration 5683
 - supplementary 1334
 - source, natural gas, plant injury 2498
 - nutrition, fertilizers, liquid 4132
 - pests, *Trialeurodes vaporariorum* 2503, 6500
 - physiology, symposium 3296
 - sulphur dioxide, injury 7296
 - temperature
 - photosynthesis 5683
 - respiration 5683
- Grevillea* spp., pruning and training, container-grown 2275
- Grewia* spp.
 - propagation
 - cuttings
 - treatment
 - growth substances
 - IAA 1011
 - IBA 1011
 - sugars 1011
- Grindelia* spp., aromatic resins 8025
- Ground cover**
 - surveys
 - photographic
 - citrus, annual report, USA 791
 - melon (cantaloup and musk) annual report, USA 600
 - onion, annual report, USA 600
- Ground cover plants**
 - growing
 - in containers 8848
 - Florida 5388
 - growth retardants 6157
 - herbicides, injury 1323
 - legumes
 - coffee, weed control 7190
 - rubber 4881
 - roadside, annual report, USA 2152
 - transport 8848
 - weed control in 710
- Growing rooms**
 - lettuce, annual report, UK 6773
 - light, sources, grapevine 5139
 - vegetables, annual report, UK 6774
- Growth chambers** 3296
 - climate, control 879, 8293
 - commercial crop production, radish 5201, 6802
 - construction, fruit trees and plants 4152
 - design 6825
 - review 8294
 - tissue culture and seedlings 873
 - design of trials 4129
 - environmental studies
 - mushroom, annual report, UK 6774
 - squash 6825
 - leaf production
 - dill 8617
 - vegetables 8617
 - light distribution, cucumber and gherkin 7689
 - operation, fruit trees and plants 4152
 - plant composition
 - dill 8617
 - vegetables 8617

Growth chambers contd.

- plant variability, cucumber and gherkin 7689
- root, temperature, control, equipment 4920
- temperature distribution, cucumber and gherkin 7689

Growth studies

- mathematical model 8296
- microclimate 8296
- photosynthates
- translocation, mathematical model 5675
- utilization, mathematical model 5675
- shoot, -root relationships, mathematical model 5676

Growth substances

- absorption
 - abscisic acid
 - apple 1777
 - lettuce 8609
 - aminozide, apple, annual report, UK 903
- foliar
 - abscisic acid, fruit trees and plants 2885
 - 2,4-D
 - fruit trees and plants 2885
 - vegetables 2032
 - NAA
 - fruit trees and plants 2885
 - orange 2401
 - pear 3495
- fruit
 - abscisic acid, tomato 2885
 - 2,4-D, tomato 2885
 - NAA, tomato 2885
 - IAA, bean (*Phaseolus*) 8696
- leaf
 - aminozide, chrysanthemum 4630
 - NAA, pear 5054
 - phenoxycetic acid and derivatives, pea 225
- root, IAA, bean (*Phaseolus*) 3714
- SADH
 - adjuvants, Tween 20 5001
 - surfactants, bean (*Phaseolus*) 1218
- activity, cytokinins, shoot, storage, grapevine 1121
- air-layering treatment
 - IBA
 - cashew 6396
 - guava 8160
 - mango 3226-3227
 - NAA
 - cashew 6396
 - mango 3227
- alkaloids
- biosynthesis
 - GA
 - Atropa belladonna* 8002
 - Datura* spp. 8002
 - Scopolia carniolica* 8002
 - content, GA, *Atropa belladonna* 7100
- amino acids
 - absorption, root, chloramphenicol, pea 1239
 - metabolism, N-*n*-butyl-N'-aryl thiourea, radish 6803
- anthocyanins, biosynthesis, inhibition, IAA, cabbage 8630
- apical dominance
 - BA, apple 965
- GA
 - bean (*Phaseolus*) 195
 - pea 3748
 - IAA, bean (*Phaseolus*) 195
 - kinetin, bean (*Phaseolus*) 195
 - morphactin, bean (*Phaseolus*) 2800
 - morphactins, capsicum 8757
 - TIBA, bean (*Phaseolus*) 2800
- application
 - adjuvants
 - oil
 - azalea 6978
 - chrysanthemum 6978
 - with ascorbic acid, aminozone, petunia 6152
 - foam, aminozone, oleander 7059
- methods
 - ancymidol, lily 4659

Growth substances contd.

- application contd.
- methods contd.
- chlormequat
 - okra 7758
 - vegetables 5198
- ethephon, rubber 8184
- GA, rhubarb 1937
- morphactins, coleus 1349
- with plant protectants, GA, citrus 5569
- post-harvest
 - 2,4-D, pear 3500
 - ethephon, tomato 2134
 - IAA, pear 3500
 - 2,4,5-T, pear 3500
- small quantities
 - aminozide, apple 5710
 - 2,4-D, apple 5710
- surfactants
 - aminozide, oleander 7059
 - chlormequat, ornamental plants 8842
- wax coatings
 - aminozide, petunia 6152
 - 2,4-D, citrus 1506
 - GA, apple 1797
- assimilates
 - translocation
 - GA, carnation 6140
 - IAA, carnation 6140
- bean, ripening, ethephon, coffee, annual report, Rhodesia 4829
- biennial bearing
 - aminozide, pear 4279
 - chlormequat, pear 4279
 - ethephon, mango 7204
 - NAA, mandarin and tangerine 802
- biosynthesis
 - cacao, cherelle wilt 384
 - IAA, tomato 250, 2127
 - seed stratification, peach 4249
- bolting
 - GA, lettuce 5914
 - MH, radish 5941
- book 1671, 7280
- branching
 - BA
 - chrysanthemum 1335
 - poinsettia 2284
 - 6-benzylamino purines 2195
 - ethephon 2195
 - chrysanthemum 1335
 - poinsettia 2284
 - GA, brussels sprouts 8631
 - kinetin, poinsettia 4697
 - morphactins, chrysanthemum 8864
 - PBA
 - chrysanthemum 1335
 - poinsettia 2284
- poinsettia 2284 TIBA 2195
- bud
 - abscission, PCPA, pistachio 1039
- development
 - CCC, pear 87
 - GA, pea 220
- MH
 - apple, annual report, UK 903
 - black currant, annual report, UK 1856
 - Malus* spp., annual report, UK 2155
 - NAA, olive 9113
 - initiation, aminozone, apple 6583
- bud break
 - adenine, rose 3921
 - BA, rose 3921
- GA
 - grapevine 583
 - rose 3921
- bud dormancy, breaking, GA, cacao 8137
- bud inhibition, auxin, brussels sprouts 150
- bulb
 - initiation, ethephon, onion 2086
 - size, MH, onion 3770
- storage
 - dormancy
 - aminozide 4524
 - ethephon 4524
 - MH 4524

Growth substances contd.

- bulb contd.
- storage contd.
 - root growth, MH, onion 3769
 - shoot growth, MH, onion, annual report, Cyprus 3604
- bulblet formation, BA, onion 1249
- calcium, translocation, TIBA, apple 961
- cambial activity, root, various, turnip 8629
- cane
 - ripening
 - aminozide, sugar cane 6449
 - chlormequat, sugar cane 6449, 9265
 - dalapon, sugar cane 9265
 - ethephon, sugar cane 1652, 6449, 9265
 - GA, sugar cane 1652, 9265
 - MCPA, sugar cane 1652
 - TBA, sugar cane 1652
 - various, sugar cane, annual report, South Africa 7230
 - 60-CS-160, sugar cane 6449
- carbohydrates
- accumulation
 - chlormequat, mandarin and tangerine 2398
 - GA, mandarin and tangerine 2398
 - kinetin, mandarin and tangerine 2398
- metabolism, GA, grapevine 3596
- cell
 - development 2087
 - auxins, radish 3673
 - BA, radish 3673
 - division, inhibition, 2,4-D, pea 2065
- expansion
 - 2,4-D, pea 2066, 8727
 - GA, apricot 7425
 - IAA, pea 8727-8729
 - NAA, pea 8727
 - 2,4,5-T, apricot 7425
- metabolism
 - BAP, pumpkin 2780
 - GA, pumpkin 2780
 - IAA, pumpkin 2780
- water permeability
 - aminozide, onion 4524
 - decenylsuccinic acid
 - onion 5313
 - Rhoeo* spp. 5313
- cell wall
 - composition
 - 2,4-D, chicory 7623
 - IAA, pea 7735
 - kinetin, pea 7735, 8730
- chlorine, absorption, kinetin, bean (*Phaseolus*) 2027
- chlorophyll
 - biosynthesis
 - CCC, lettuce 137
 - GA
 - Atropa belladonna* 8002
 - Datura* spp. 8002
 - Scopolia carniolica* 8002
 - orthochlorophenoxycetic acid, orchids 7029
- content
 - chlormequat, *Vinca* spp. 1442
 - ethephon, radish 7668
 - GA, lettuce 6789
 - leaf, cytoquinine active compounds, bean (*Phaseolus*) 2799
- metabolism
 - cucumber 151
 - kale 151
- chloroplast
 - chlorophyll content, cucumber and gherkin 2005
- development
 - BAP, pumpkin 2780
 - GA, pumpkin 2780
 - IAA, pumpkin 2780
 - number, cucumber and gherkin 2005
- chlorosis, GA, lettuce 6789
- cold, resistance, chlormequat, tomato 6100
- conference 7283
- corm
 - splitting, ethephon, gladiolus 2239
 - storage, ethephon, gladiolus 2239
- corm production, ethephon, gladiolus 1358

Growth substances *contd.*

- cormel
 - formation
 - abscisic acid, gladiolus 6174
 - GA, gladiolus 6174
 - kinetin, gladiolus 6174
- cormel production, ethephon, gladiolus 1358
- curd, formation, morphactins, cauliflower and broccoli 7661
- cuttings
 - leaf
 - treatment
 - cytokinins, begonia 2223
 - GA, begonia 2223
 - IAA, begonia 2223
 - NAA, begonia 2223
 - saintpaulia 7887
- root, treatment, IBA, tree fruits 8323
- source plants
 - treatment
 - BA
 - chrysanthemum 1335
 - poisetia 2284
 - ethephon, poinsettia 2284
 - GA
 - cherry 1809
 - peach 1809
 - IBA, mango 3219
 - PBA, poinsettia 2284
 - TIBA, poinsettia 2284
- treatment
 - aminozide, poinsettia 2281
 - auxins, tea 3264
 - BA, poinsettia 2281
 - blueberry, annual report, Yugoslavia 3517
 - chlormequat, poinsettia 2281
 - Chloromone, magnolia 5466
 - p-coumaric acid, bean (*Phaseolus*) 8678
 - coumarin, bean (*Phaseolus*) 8678
 - Cutstart, azalea 3917
 - 2,4-D
 - bean (*Phaseolus*) 8678
 - magnolia 5466
 - ethephon, chrysanthemum 4623
 - ferulic acid, bean (*Phaseolus*) 8678
 - F529, poinsettia 2281
 - GA
 - apple 2543
 - Ipomoea* spp. 2930
 - morning glory 4632
 - Hormodin, viburnum 2312
 - Hormodin no.3, azalea 3917
 - p-hydroxybenzoic acid, bean (*Phaseolus*) 8678
 - IAA 1408
 - bean (*Phaseolus*) 3721, 6853, 8678
 - bougainvillea 2980
 - cherry 4513
 - chrysanthemum 6971
 - conifers 3910
 - grapevine 1900
 - hop 5504
 - olive 9110
 - ornamental plants 7886
 - plants from irradiated seeds, bean (*Phaseolus*) 3711
 - trees and shrubs 1011
 - IBA 1408
 - apple 2543-2544, 7338
 - azalea 3917
 - blueberry 1866
 - bougainvillea 2980
 - cherry 1809
 - chrysanthemum 4623, 6971
 - conifers 5462
 - cornus 4718
 - grapevine 2713
 - litchi 814
 - magnolia 5466
 - Malus* spp. 3931
 - morning glory 4632
 - myrobalan 1850
 - oleander 7959
 - olive 2314, 9110
 - orange 3986
 - peach 1809, 3467
 - peach rootstocks 1817
 - plum 1850, 3508, 5061
 - poinsettia 2281

Growth substances *contd.*

- cuttings *contd.*
 - treatment *contd.*
 - IBA *contd.*
 - Populus* spp. 3009
 - Prunus mahaleb* 6616
 - P. spp.* 3509
 - tree fruits 4178, 8323
 - trees and shrubs 1011
 - Ziziphus jujuba* 3293
- indole acid, bean (*Phaseolus*) 8678
- Jiffy-Grow, viburnum 2312
- kinetin, ornamental plants 7886
- malformin, bean (*Phaseolus*) 3721
- 2-methyl-5-oxybenzofuran-3-carbonic acid, peach 3467
- NAA
 - bean (*Phaseolus*) 8678
 - blueberry 1866
 - bougainvillea 2980
 - cherry 4513
 - cola, annual report, Nigeria 4035
 - conifers 5462
 - cornus 4718
 - litchi 814
 - olive 9110
 - peach rootstocks 1817
 - pepper, black 1408
 - plum 3508
- NAAM, blueberry 1866
- α -naphthol, bean (*Phaseolus*) 8678
- pyrogallol, bean (*Phaseolus*) 8678
- Rhizopone, plum 3508
- Rootone, viburnum 2312
- SADH, ornamental plants 713
- salicylic acid, bean (*Phaseolus*) 8678
- Seradix B-3, bougainvillea 8942
- TIBA, cola, annual report, Nigeria 4035
- trees and shrubs, annual report, Netherlands 4604
- defoliation, Ethrel, coffee 1574
- desiccants, pre-harvest, dimexan, onion, annual report, UK 3610
- disease
 - expression
 - 2,4-D, coffee 1574
 - NAA, coffee 1574
- disease control
 - aminozide, cherry, annual report, Canada 8314
 - chlormequat, grapevine 5129
 - GA, cherry, annual report, Canada 8314
 - Off-Shoot O, apple 2576
 - Off-Shoot T, apple 2576
- disease incidence
 - 2,4-D
 - grapefruit 1506
 - orange 1506
 - GA, tomato 3815
 - IAA, tomato 3815
- disorder control, chlormequat, grapevine 5125
- disorder incidence
 - apple, annual report, USA 24
 - chlormequat, grapevine 5872
 - ethephon, apple 8409
- dormancy
 - breaking
 - GA
 - artichoke, jerusalem 2749
 - tea 6461
 - kinetic, tea 6461
 - induction, abscisic acid, apple 4220
- dwarfing
 - aminozide
 - apple 966
 - azalea 4702
 - bean (*Phaseolus*) 2031
 - chrysanthemum 2031, 2926, 7861
 - Euphorbia fulgens* 6237
 - geranium 8871
 - gloxinia 6176
 - grapefruit 2400
 - lily 8896
 - oleander 3932
 - poinsettia 4695
 - AMO-1618, *Ipomoea* spp. 6151
 - ancymidol
 - azalea 4702
 - chrysanthemum 1336, 7861
 - geranium 6983, 7866

Growth substances *contd.*

- dwarfing *contd.*
 - ancymidol *contd.*
 - gloxinia 6176
 - lily 1361, 2251, 4659
 - petunia 2931
 - poinsettia 1390
 - Zantedeschia* spp. 2950, 4660
- BA, chrysanthemum 1335
- butylammonium bromides
 - bean (*Phaseolus*) 2031
 - chrysanthemum 2031
- CBBA, citrus 3141
- CBBP, azalea 4702
- CCC, lily 1361
- CHE-8913, lily 2251-2252
- chlormequat 3141
 - bean (*Phaseolus*) 2031
 - begonia 5420
 - chrysanthemum 2031, 2926
 - Euphorbia fulgens* 6237
 - geranium 2194, 2196, 6983, 7866, 8870-8871
 - annual report, UK 6128
- Ipomoea* spp. 6151
- lily 2251, 5430, 8896
- oleander 3932
- ornamental shrubs 1384
- poinsettia 1389, 2984, 4695-4696
- CPA 3141
- CTBP, azalea 4702
- EL-531, lily 2252
- EL 558, chrysanthemum 7861
- ethephon, lily 1361
- IT-3233 3141
- IT-3456 3141
- lily 5431
- limonene derivatives, grapefruit 2400
- methyl caprate 3141
- MH
 - chrysanthemum 2926
 - citrus 2402
- MH-30, ornamental shrubs 1384
- morphactins, coleus 1349
- naptalam 3141
- Pericetac, poinsettia 4695
- Phosfon
 - azalea 4702
 - chrysanthemum 2926
 - lily 2251-2252
- Phosphon, chrysanthemum 7861
- potassium azide 3141
- PPA, azalea 4702
- Pydanon, bedding plants 5390
- SADH, ornamental shrubs 1384
- various, ornamental plants 4610

endogenous

apices

- curd development, cauliflower and broccoli 3667
- temperature, cauliflower and broccoli 3667
- apple, annual report, UK 8317
- apricot 5758
- report, Australia 3344
- biosynthesis
 - apple 923
 - Kalanchoe* spp. 3902
- Brassica napus* 4726
- bud
 - apple 5742
 - black currant 527
 - dormancy, apple 6575
 - seasonal variations, peach, annual report, USA 3349
 - walnut 2663
- bulb, onion 3772
- citrus 4014
- cotyledons, tomato 248
- cuttings
 - rooting capacity
 - apple 926
 - conifers 3910
 - translocation, grapevine 1091
- defoliation, grapevine 7586
- determination
 - abscisic acid 2378
 - 1-acetoxy-2,4-dihydroxy-n-hepta-deca-16-ene 2378
 - auxins 2378
 - coffee 7196
 - cucumber and gherkin 6827

Growth substances *contd.*endogenous *contd.*determination *contd.*

GA

- apple 1776
- cucumber and gherkin 4460

gibberellins

- peach 5776

IAA

- begonia 7289
- Cleome spinosa* 7289
- Kalanchoe blossfeldiana* 7026
- methods 6489
- xanthoxin 3719

diseased plants

- peach 5039

Verticillium dahliae, tomato 3325

Enhydra fluctuans 3011

flower

- abscission, *Cleome hassleriana* 8876
- carnation 6140
- chrysanthemum 2191
- development, *Cleome hassleriana* 8876
- melon (cantaloup and musk) 1199
- opening, IAA, squash 2007
- peach 5042
- pear 4280
- Pharbitis* spp. 7869
- senescence, rose 2297, 3922
- walnut 2663

flower abscission layer, *Hibiscus* spp. 7049

flower bud

- development, coffee 7196
- photoperiodism, blueberry 3530

fruit

- abscission, peach 3483
- apical dominance, mango 3234
- avocado 2378, 3093
- cherry 5761
- chloroplasts, development, citrus 2399
- grapevine 592, 5140
- mango 3241
- parthenocarpy, pear 8470
- peach 5776
- pear 4280
- ripening, grapevine 7586
- seasonal variations, pear 8470
- set, grapevine 7586
- walnut 2663
- Zantedeschia aethiopica* 8911

growth substances application,

- chrysanthemum 8864

humic acid

- cucumber and gherkin 684
- tomato 684

leaf

- abscission
 - bean (*Phaseolus*) 3718
 - euonymus 3718
- apple 920, 4995
- chrysanthemum 2191
- colchicine treatment, bean (*Phaseolus*) 6851
- euonymus 3718
- Kalanchoe* spp. 4677
- lavender 2323
- mango 3233
- senescence, coleus 8923
- senescence bean (*Phaseolus*) 3718
- strawberry 4332
- Streptocarpus* spp. 7890
- temperature, apple 2553
- translocation, monocotyledons 706
- walnut 2663

light, red, pea 4514

morning glory 1339

mutants, bean (*Phaseolus*) 4465

nut, hazel 8448

pea 3744

peach 5758

plant

- apical dominance, pea 4510
- cucumber and gherkin 154, 1198
- dormancy 8568
- apricot 5758
- peach 5758
- flower, sex, cucumber and gherkin 5227
- melon (cantaloup and musk) 1198
- photoperiodism, grapevine 6759

Growth substances *contd.*endogenous *contd.*plant *contd.*

- seasonal variations 8568
- tulip 295

ringing

- grapevine 1928, 7586
- orange 4807, 8083

root

- apple 4219, 4995, 7399
- diseased plants, cabbage 8623
- temperature, apple 2553
- tomato, nematodes 244

runner bud, strawberry 4332

seed

- apple 3380
- avocado 9069
- cherry 6620
- cucumber and gherkin 1197-1198
- flower bud initiation, apple, annual report, UK 903
- fruit trees and plants 2523
- guava 9175
- mango 3241
- melon (cantaloup and musk) 1197-1198
- peach 2637, 4249, 5772
- report, USA 8320
- pear 4280
- Protea* spp. 750

seedling, peach 5772

shoot

- apical dominance, mango 3234
- apple 4995, 7399
- asparagus 4517
- chrysanthemum 2191
- grapevine 1121
- ivy 3006
- lavender 2323
- mango 3233
- pea 1236, 6011
- pruning and training, apple 8367
- tomato 251

shoot apices, apple 47

shoot tip, cucumber and gherkin 6828

shoot-tip

- flower bud initiation, sugar cane 9264
- photoperiodism, sugar cane 9264
- spathe, *Zantedeschia aethiopica* 8911
- translocation
- coleus 8923
- ethylene, pea 2059
- tuber, kohlrabi 5197
- tulip, annual report, USA 8839
- wilting, pea 3743

enzyme activity

- auxins, pea 2820
- cotyledons, cytokinins, fenugreek 3977
- cytokinins, pea 2820
- ethephon, cucumber and gherkin 2777

fruit

- aminozide, tomato 8799
- ethephon, tomato 8799
- GA, tomato 8799
- IAA, tomato 8799
- fruit abscission layer, cycloheximide, orange 8085
- GA, grapevine 1122
- inhibition, PRB-8, cress 8986

leaf

- 2,4-FET, tomato 6102
- 2,4,5-FET, tomato 6102
- 2,4,5-T, tomato 6102

plant

- aminozide, tomato 5361
- GA
 - impatiens 7884
 - tomato 5361

root

- amino acids, pea 4509
- IAA, pea 6010
- kinetin, pea 6010

seed

abscisic acid, bean (*Phaseolus*) 5992

shoot, IAA, pea 7736-7737

essential oil, composition, MH, mint 5499

ethylene

- Actinomycin D, *Cymbidium* spp. 6209
- cycloheximide, *Cymbidium* spp. 6209
- ethionine, *Cymbidium* spp. 6209

Growth substances *contd.*ethylene *contd.*

production

- abscisic acid 1703
- dahlia 4653
- orange 2069
- pea 2069
- aminozide
 - dahlia 4653
 - peach 4264
- auxins 1703
- chlormequat, apple 1786
- cycloheximide
 - orange 2405, 3148
 - tangelo 2405
- cytokinins 1703
- ethephon
 - cherry 2631
 - cranberry 2691
 - dahlia 4653
 - olive 2422
 - peach 2643, 4264
 - tomato 3813

GA

1703

orange 2069

pea 2069

IAA

apple 5003

orange 2069

pea 2069

inhibition, cycloheximide, bean

(*Phaseolus*) 4483

kinetin

orange 2069

pea 2069

NAA, *Cymbidium* spp. 6209

TIBA, apple 5003

extraction, IAA, apple 920

flower

development

- adenine sulphate, grapevine 5141
- BA, grapevine 5141
- chlormequat, *Clerodendron* spp. 7953

GA

Clerodendron spp. 7953

Pharbitis spp. 7869

IAA, *Pharbitis* spp. 7869

drop, GA, lily 1362

drying quality, MH, chamomile 3083

maturity, GA, artichoke, globe 3636

morphology, GA, tomato 2884

number

aminozide, apple 966, 8398

chlormequat, geranium 8870

EL-531, lily 5431

ethephon, lily 5431

removal, Off-Shoot-T, strawberry

4333, 8519-8520

senescence, abscisic acid, rose 3922

sex

abscisic acid

- cucumber and gherkin 5227
- hemp (*Cannabis*) 3056
- CCDP, cucumber and gherkin 4463
- chlormequat, watermelon 8666
- cytokinin, grapevine 5869
- 2,4-dichlorophenoxybutyric acid
- coriander 1407
- fennel 1407
- okra 1407
- ethephon
 - cucumber and gherkin 634, 5967, 6829
 - cucurbits 1201, 5231
 - melon (cantaloup and musk) 1202
 - squash, annual report, Italy 6771
 - watermelon 8666
- F.W.450, coriander 8987
- GA, hemp (*Cannabis*) 3056
- IBA, coriander 8987
- MH, coriander 8987
- morphactins, capsicum 8757
- NAA, cucurbits 1201
- TIBA, watermelon 8666

sex expression

- GA, melon (cantaloup and musk) 1199
- SADH, melon (cantaloup and musk) 1199

size

- aminozide, chrysanthemum 2926
- chlormequat, chrysanthemum 2926

Growth substances *contd.*flower *contd.*size *contd.*

- GA, chrysanthemum 2926, 2926
- MH, chrysanthemum 2926, 2926
- structure, morphactins, capsicum 8757
- thinning, GA, grapevine, annual report, Cyprus 3560

flower bud

development

- BA, chrysanthemum 2928
- coffee, annual report, UK 2449
- GA
 - artichoke, globe 3636
 - chrysanthemum 2928
 - IAA, chrysanthemum 2928
- distribution, chlormequat, grapevine 6760

drop

- GPA, pea 7745
- PCPA, pistachio 994

initiation

- aminozide
 - cauliflower and broccoli 6800
 - pear 1840, 4279
- application, time of, black currant 104
- BOH, bromeliads, annual report, Belgium 8835
- chlorthaleno, marigold 7879
- chlormequat
 - geranium 2194
 - lemon 7150
 - pear 1840, 4279, 8468
- ethephon
 - bromeliads
 - annual report
 - Belgium 8835
 - Netherlands 6126
 - cucurbits 1201
 - mango 7204
 - raspberry 1058
 - watermelon 633

5-fluorodeoxyuridine, citrus 368

GA

- annual report, UK 8317
- cauliflower and broccoli 6800
- lemon 7150
- lily 1362
- pea 7745
- peach 1826, 5774
- pear 1840
- strawberry 1888, 6710
- hydroxyethylhydrazine, bromeliads, annual report, Netherlands 6126

inhibition

- GA, pear 7461
- IAA, *Aranda* spp. 6210
- morphactins, peach 8460
- NAA
 - bromeliads 1372
 - cucurbits 1201
- SADH, raspberry 1058
- thymidine, citrus 368
- number, chlormequat, grapevine 6760

flower dormancy, breaking, GA, petunia 6986

flower stem

development, ethephon, onion 4525

length

- chlormequat, bedding plants 6987
- ethephon, onion 4525
- GA
 - bedding plants 6987
 - tulip 8907

flowering

aminozide

- apple 3417
- azalea 4702
- cherry, annual report, Canada 8314
- chrysanthemum, annual report, UK 4622
- mango 3236
- olive 9113

ancymidol

- azalea 4702
- geranium 7866
- Hibiscus* spp. 7052
- BA, chrysanthemum 2928
- CBBP, azalea 4702
- chlorthaleno, marigold 7879
- chlormequat
 - geranium 7866

Growth substances *contd.*flowering *contd.*chlormequat *contd.*geranium *contd.*

- annual report, Netherlands 6127
- Hibiscus* spp. 7052
- mango 3236
- onion 3770

CTBP, azalea 4702

date

- aminozide 3170
- apple, annual report, USA 3349
- capsicum 4541, 5327
- chrysanthemum 2926
- gloxinia 6176
- grapevine 4357
- tung 4828

ancymidol

- chrysanthemum 1336
- gloxinia 6176
- lily 4659
- Zantedeschia* spp. 2950
- 6-benzylamino purines, geranium 2195

chlormequat

- chrysanthemum 2926
- okra 7758
- tomato 6093

ethephon

- capsicum 4541, 5327
- cherry 8432
- chrysanthemum 1335
- geranium 2195
- lily 5431
- mango 7204
- watermelon 8666

GA

- artichoke, globe, annual report, Cyprus 3604
- bedding plants 6987
- capsicum 4541, 5327
- chrysanthemum 2926
- grapevine 7589
- lily 1362
- tulip 8907
- MH, chrysanthemum 2926
- morphactins, chrysanthemum 8864
- NAA, capsicum 4541, 5327
- naphthenic oil 3170
- phenyl mercuric acetate, tomato 6093
- Phosfon, chrysanthemum 2926

2,4-D

- capsicum 8756
- pineapple 1613

ethephon, *Hibiscus* spp. 7052

GA

- apple 3417
- chamomile 3054
- cherry, annual report, Canada 8314
- chrysanthemum 2928
- mango 3237
- peach 5774
- tagetes 2217
- tulip 1367

IAA, chamomile 3054

IBA, capsicum 8756

inhibition

- abscisic acid
 - Kalanchoe* spp. 4677
 - olive 9113

GA

- Kalanchoe* spp. 4677
- olive 9113

MH, onion 3770

xanthoxin, *Kalanchoe* spp. 4677

kinetin, tomato 7807

morphactins

- apple 5743
- cauliflower and broccoli 7661

NAA

- chamomile 3054
- pineapple 1613
- NAD, apple 3424
- phosphon, azalea 4702
- PPA, azalea 4702
- thymine, tomato 7807
- TIBA, tagetes 2217

flowers, cut

- opening, Aadural-AK, chrysanthemum 719
- preservatives
 - abscisic acids, rose 2301

Growth substances *contd.*flowers, cut *contd.*preservatives *contd.*

- aminozide, rose 7950
- ancymidol, rose 7950
- benzothiadiazole, carnation, annual report, USA 3835
- chlormequat, rose 7950
- HQC, rose 7950
- SD-8339, rose 7950

stem

bending

- ancymidol, tulip 3879
- Phosfon, tulip 3879

length

- ancymidol, tulip 3879
- Phosfon, tulip 3879

frost resistance, aminozide, apple 8399

fruit

abscission

- abscisic acid, citrus 3146
- aminozide, apple 1783
- auxin, citrus 3146
- cycloheximide
 - olive 6378
 - orange 2406, 4009
- 2,4-D, orange 2406
- ethephon
 - apple 1783
 - cherry 2631
 - fenoprop interaction, apple 976
 - orange 2406, 4009
 - GA, peach 5775

acidity

- aminozide, apple 3425
- ethephon, apple 3425
- fenoprop, apple 3425
- GA, grapevine 2731, 3597, 8572
- NAA, grapevine 2731

ascorbic acid

content

- aminozide, tomato 6094
- GA, tomato 6094

bunch number, chlormequat, grapevine 6764

bunch shape

- chlormequat, grapevine 4356, 5872

'GA, grapevine 2729, 4356

bunch size

- aminozide, grapevine 3591
- chlormequat, grapevine 6764
- GA, grapevine 593, 3591, 3593, 5873, 8574

carotene

content

- aminozide, tomato 6094
- GA, tomato 6094

colour

aminozide 1796

- apple 3425, 5746, 6583, 7408
- cherry, annual report, Canada 8314
- peach 1830, 8462
- tomato 8799

2,4-D

- banana 2439-2440
- pear 3500

ethephon 1796

- apple 976, 3425, 5746, 8409
- annual report, Belgium 6503

cherry 500

citrus 2407

- mandarin and tangerine 3149
- peach 1829
- rose, annual report, Netherlands 4604

tomato 8799

fenoprop, apple 976, 3425

GA

- cherry, annual report, Canada 8314
- mandarin and tangerine 804
- persimmon 3169
- tomato 8799

IAA

- pear 3500
- tomato 8799
- NAA, apple 5746
- SADH, peach 1026
- 2,4,5-TP, apple 5746
- 2,4,5-T
 - banana 2439
 - pear 3500

Growth substances *contd.*

- fruit *contd.*
 colour *contd.*
 2,4,5-T *contd.*
 banana 2440
 composition
 aminozide, grapevine 4355
 chlormequat, grapevine 2727, 5871
 2,4-D, banana 2438
 ethephon
 apple 8409
 melon (cantaloup and musk) 2781
 GA
 banana 2438
 grapevine 2731, 3597, 5871
 orange 1500, 4007
 NAA
 grapevine 2731
 mandarin and tangerine 802
 TIBA, mandarin and tangerine 802
 cracking
 chlormequat, grapevine 5871
 GA, grapevine 5871
 degreening, ethephon, citrus 2409
 development
 adenine sulphate, grapevine 5141
 aminozide, apple 6576
 BA, grapevine 5141
 GA, orange 1500
 disorders
 aminozide, apple 1796, 7408
 ethephon, apple 1796
 GA, mandarin and tangerine 804
 NAA, apple 5005
 phloridzin, apple 5005
 drop
 aminozide, apple 1783, 3401, 5746, 6583
 apple, annual report, UK 903
 calcium orthophosphate 2402
 chloroflurenol, coconut 1566
 cytokinins, apple 5000
 2,4-D 2402, 2459, 3144
 orange 8091
 ethephon 2459
 apple 5746, 6583, 7406
 coconut 1566
 raspberry, annual report, Netherlands 6670
 fenoprop, pear 8469
 GA 2402, 2459
 apple 5000, 7405
 cherry 8444
 anatomy 68
 grapevine 3594
 pear 8469
 kinetin, cherry 8444
 MH 2402
 apricot 994
 NAA 2459, 3144
 apple 3421, 3426, 5000, 5746
 NRL, apple 3421
 potassium dihydrogen phosphate 2402
 TIBA, apple 5000
 2,4,5-TP 2459, 3144
 apple 3426, 5746
 2,4,5-T 3144
 orange 8091
 firmness
 aminozide
 apple 976, 3425, 6583
 peach 1830, 6636
 tomato 8799
 ethephon
 apple 976, 1783, 3425, 6583
 gooseberry 3522
 peach 1829
 tomato 8799
 fenoprop, apple 976, 3425
 GA
 persimmon 3169
 tomato 8799
 IAA, tomato 8799
 SADH, apple 482
 flavour
 2,4-D, pear 3500
 ethephon
 gooseberry 3522
 persimmon 1525
 injury
 cycloheximide
 olive 6378

Growth substances *contd.*

- fruit *contd.*
 injury *contd.*
 cycloheximide *contd.*
 orange 3148, 4010, 5572
 erythorbic acid, orange 5572
 hexamic acid, orange 5572
 limonin, content, ethephon, orange 5576
 loosening
 ABA, apple 975
 aminozide
 orange 3148
 peach, annual report, USA 3348
 annual report, Netherlands 23, 100
 chlormequat, olive 9114
 cycloheximide
 apple 975
 cherry 8445
 olive 1520, 7166
 orange 2405, 3147-3148, 4010-4011, 5572
 tangelo 2405
 dichloroacetate, olive 9114
 2,4-D, cherry 8445
 erythorbic acid, orange 5572
 ethephon 501
 apple 975
 cherry 500, 2633, 7433, 8445
 annual report
 Belgium 6503
 USA 8319
 citrus 2407
 damson, annual report, UK 3347
 fruit trees and plants 5801
 gooseberry 3522
 mechanical harvesting, black currant 1858
 olive 1521, 2422, 6379, 7166, 9114
 peach 2643
 plum 6662
 small fruits 6678
 walnut 6662
 GA
 cherry 8445
 grapevine 2731
 glycerine, olive 9114
 hexamic acid, orange 5572
 moniodoacetate, olive 9114
 morphactins, cherry 8445
 NAA
 apple 975
 grapevine 2731
 Regulaid, peach, annual report, USA 3348
 2,4,5-TP, olive 9114
 maturity
 aminozide
 apple 976
 peach 4264
 ethephon
 apple 976
 annual report, UK 8317
 peach 4264
 fenoprop, pear 8469
 GA
 apple, annual report, UK 8317
 grapevine 2731
 strawberry 6710
 NAA, grapevine 2731
 2,4,5-T, apple, annual report, UK 8317
 number
 chlormequat, watermelon 8666
 2,4-D, capsicum 8756
 ethephon, watermelon 8666
 GA
 grapevine 3593
 strawberry 3557
 IBA, capsicum 8756
 TIBA, watermelon 8666
 number per bunch
 chlormequat, grapevine 5871
 GA, grapevine 5871
 parthenocarp
 CPA, tomato 6934
 DPX 1840, cucumber and gherkin 5968
 GA
 black currant 1861
 grapevine 3594, 7589, 8574
 peach 5043, 5775

Growth substances *contd.*

- fruit *contd.*
 parthenocarp *contd.*
 morphactins, cucumber and gherkin 4463
 TIBA, cucumber and gherkin 635, 4463
 pigment accumulation, ethephon, citrus 2410
 quality
 aminozide
 apple
 annual report
 UK 903
 USA 3348
 grapevine 8575
 strawberry 6708
 chlormequat, strawberry 6708
 ethephon
 apple
 annual report
 UK 903
 USA 3348
 fig 1812
 melon (cantaloup and musk) 2781
 GA, lime (*Citrus*), annual report, USA 2375
 NAA
 apple, annual report, USA 3348
 mandarin and tangerine 6358
 review 1792
 SADH, apple 488
 2,4,5-TP, apple, annual report, UK 903
 respiration
 aminozide, apple 1783
 ethephon, apple 1783
 ripening
 abscisic acid, pear 1842
 aminozide
 apple 5746
 cherry, annual report, USA 8319
 grapevine 4357
 peach 1026, 1830, 4264, 5776, 8462
 tomato 8799
 benzyladenine, cherry 1004
 Betokson, tomato 676
 chlormequat, date, annual report, Tunisia 3981
 3-CPA, peach 83
 2,4-D
 banana 2438-2439
 guava 9176
 ethephon
 apple 5746, 7406, 8409
 annual report, Irish Republic 1720
 coffee 837
 annual report, Nigeria 4035
 damson, annual report, UK 3347
 date, annual report, Tunisia 3981
Ficus sycomorus 1811, 2636
 fig 1812, 3455
 melon (cantaloup and musk) 1202, 2781
 peach 83, 1829, 4264
 tomato 689, 2134, 2886, 3817-3818, 4583, 6935, 8798-8799, 8802, 8804
 annual report
 UK 5885
 USA 4368
 tropical fruits 4045
 ethylhydrogen 1-propylphosphate, tomato 689
 2,4-FET, tomato 6102
 2,4,5-FET, tomato 6102
 GA
 banana 2438
 cherry 1004
 grapefruit 1502
 grapevine 3593, 5870, 8572, 8574
 guava 9176
 lemon 1502
 strawberry 3557
 tomato 8799
 grapevine, report, Australia 6712
 IAA, tomato 8799
 inhibition
 2,4-D, pear 7462
 IAA, pear 7462
 kinetin, cherry 1004

Growth substances *contd.*fruit *contd.*ripening *contd.*

- MH, guava 9176
- NAA, apple 5746
- review, tree fruits 7407
- 2,4,5-TP, apple 5746
- 2,4,5-T
 - banana 2439
 - guava 9176
 - tomato 6102

russetting, SADH, apple 482

set

- adenine sulphate, grapevine 5141
- aminozide
 - apple, annual report, USA 3349
 - grapevine 2730, 4355
 - annual report, USA 8525
 - tung 3170
- annual report, Australia 450

BA

- apple 1782
- grapevine 5141

CCC, pear 87

chlorflurenol, cucumber and gherkin 5967

chlormequat

- grapevine 6764
- mango 3236
- 4-CPA, eggplant 3786
- Duraset, eggplant 3786

2,4-D

- eggplant 3786
- lime (*Citrus*) 1499
- orange 8091

ethephon

- cucumber and gherkin 5228, 6829
- melon (cantaloup and musk) 1202
- raspberry, annual report, Netherlands 6670

GA

- apple 1782, 7405
- black currant 1861, 5699
- chlormequat, grapevine 4356
- lime (*Citrus*) 1499
- orange 1500, 4007, 8091
- pear 7461
- small fruits, annual report, Australia 4296

giberrellins, apple 1781

naphthenic oil, tung 3170

orange 1501

parthenocarpic, GA, pear 8469

PCPA, small fruits, annual report, Australia 4296

2,4,5-TP, pear, annual report, Australia 5693

2,4,5-T

- lime (*Citrus*) 1499
- orange 8091

shape

aminozide, apple 7408

BA, apple 1782

CPA, tomato 6934

2,4 - D, banana 2439

GA

- apple 1782
- grapevine 2729, 3594
- orange 1500
- 2,4,5-T, banana 2439

size

- aminozide
 - apple 6583
 - grapevine 3591, 4355, 4357, 8575
 - peach 6636
 - pear 4279
- annual report, Australia 450

chlormequat

- grapevine 4356, 5872
- pear 4279

CPA, tomato 6934

2,4-D

- capsicum 8756
- orange 8091

ethephon

- apple 6583
- melon (cantaloup and musk) 2781

GA

- apricot 7425
- grapevine 1122, 2729, 3591, 3593, 4354, 4356, 5873, 7859
- annual report, Cyprus 3560
- mandarin and tangerine 803

Growth substances *contd.*fruit *contd.*size. *contd.*GA *contd.*

- orange 1500-1501
- peach 5043
- small fruits, annual, Australia 4296

strawberry 1880, 3557

tomato 2884

IBA, capsicum 8756

NAA, mandarin and tangerine 802

PCPA, small fruits, annual, Australia 4296

SADH, apple 5001

TIBA, mandarin and tangerine 802

2,4,5-T, apricot 7425

splitting

ethephon, peach 83

GA, tomato 2128

IAA, tomato 2128

NAA, tomato 2128

storage

2,4-D, banana 2438

ethephon, apple, annual report, UK 8317

GA

apple, annual report, UK 8317

banana 2438

strawberry, annual report, UK 7489

review, tree fruits 7407

2,4,5-T, apple, annual report, UK 8317

storage life

aminozide, apple 5746, 7408

ethephon, apple 5746

GA, persimmon 3169

NAA, apple 5746

2,4,5-TP, apple 5746

sugars

content

chlormequat, grapevine 5872, 6764

2,4-D, cherry 1002

GA, cherry 1002

kinetin, cherry 1002

thinning

annual report

Australia 450

Belgium 902

apple, annual report, UK 903

chlorflurenol methyl ester, peach 4262

CPA, peach 1024

3-CPA 3485

peach 83, 2645, 3483

2,4-D

apricot 6613

citrus 2402

peach 6613

ethephon 3485

apple, annual report, Netherlands 5697

peach 83, 2644, 3483

pecan 90

plum, annual report, UK 3371

flurenol n-butyl ester, peach 4262

GA, grapevine 588

MH

apricot 6613

citrus 2402

peach 6613

morphactins, peach 5743

NAA

apple 974, 1785

apricot 6613

mandarin and tangerine 801, 3145, 6358

peach 6613

pear 4281

NAD

apple 974, 1784

pear 4281

naphthylphthalamic acid, peach 1827

N-1-naphthylphthalamic acid, peach 1828

PRB 8 E 25, apple, annual report, Netherlands 5697

1,1,5,5-tetramethyl-3-dimethylaminodithiobiuret, peach 515

Growth substances *contd.*fruit *contd.*thinning *contd.*

TH 656, mandarin and tangerine 3145

2,4,5-T

apricot 6613

peach 6613

peach 6613

plum 7479

weight

2,4-D, guava 9176

GA, guava 9176

MH, guava 9176

2,4,5-T, guava 9176

fruiting, GA, grapevine 593

fungicides

efficiency, ethephon, gladiolus 2239

translocation

aminozide

almond 5707

chestnut (*Castanea*) 5707

peach 5707

chlormequat

almond 5707

chestnut (*Castanea*) 5707

peach 5707

glycosides

content

GA, tomato 8794

IAA, tomato 8794

growth

aminozide, ornamental plants, annual report, Netherlands 6127

EL 531, ornamental plants, annual report, Netherlands 6127

phosfon, ornamental plants, annual report, Netherlands 6127

Pydanon, ornamental plants, annual report, Netherlands 6127

reduction

aminozide, apple 1731

chlormequat, bedding plants 6987

retardation

annual report, Austria 265

B9, bougainvillea 314

cycocel, bougainvillea 314

Phosfon, bougainvillea 314

growth inhibition

abscisic acid, apple 1777

abscisic acid derivatives, tissue culture, bean (*Phaseolus*) 2804

chloramphenicol, lettuce 8607

cycloheximide, *Kalanchoe* spp. 5455

2,4-D, bean (*Phaseolus*) 7717

5-fluorodeoxyuridine, mustard 7074, 3942

grass swards, annual report, Belgium 902

IAA, pea 3748

NIA-10637, avocado 4783

NIA-10656, avocado 4783

trisporic acid, pea 7738

growth reduction

aminozide

apple 3417

grapevine 4355

mango 3236

chlormequat

grapevine 5872, 6760

mango 3236

GA, apple 3417

harvesting, period, GA, cauliflower and broccoli, annual report, UK 4366

herbicides

translocation

2,4-D, bean (*Phaseolus*) 5988

PCPA, bean (*Phaseolus*) 5988

hypocotyl

elongation

AMP, lettuce 138

GA, lettuce 138

growth

bromodeoxyuridine, tomato 3812

deoxyuridine, tomato 3812

IAA translocation

abscisic acid, coleus 8923

DPX1840, bean (*Phaseolus*) 2824

injury

aminozide, grapevine 8575

ancymidal, lily 2251

ancymidol, poinsettia 8946

chlorflurenol, marigold 7879

Growth substances *contd.*injury *contd.*

- chlorflurenol methyl ester, peach 4262
 chlormequat
 campanula 6160
 lily 5430
 ornamental plants 8842
 chlorosis, chlormequat, poinsettia 1389
 3-CPA, peach 3485
 cytokinins, apple 1781
 2,4-dichlorophenoxybutyric acid
 coriander 1407
 fennel 1407
 okra 1407
 DPX 1840, cucumber and gherkin 5968
 2,4-D
 eggplant 3786
 lettuce 609
 ethephon
 cherry 7433
 fig 1812
 tree fruits 7314
 flurenol n-butyl ester, peach 4262
 GA
 grapevine 2732
 lettuce 5914
 MH, onion 3770
 NAA, conifers 5462
 Phosphon, tulip 3879
 1-propylphosphonic acid, privet 7958
 testing, chloramphenicol, bean (*Phaseolus*) 193
 thiouracil, papaw 401
 TIBA, *Kalanchoe* spp. 2976
 2,4,5-TP, apple 5729
 various, radish, annual report, German Federal Republic 7598

interaction

abscisic acid

- BA application, ivy 6217
 GA application, hemp (*Cannabis*) 3056

aminozide, GA application 3417

applied

- abscisic acid, and endogenous, apple 3380
 aminozide, and endogenous, pea 3744
 BA, and endogenous, apple 2553
 chlormequat
 and endogenous
 Lonicera spp. 8965
 pea 3744
 p-coumaric acid, and endogenous, pea 3744
 cytoquinine active compounds, bean (*Phaseolus*) 2799
 2,4-D, and endogenous, capsicum 8756
 ethephon, and endogenous, cucumber and gherkin 5227
 IBA, and endogenous, capsicum 8756
 kinetin, and endogenous, apple 2553
 morphactins, and endogenous, chrysanthemum 8864
 phosphon-D, and endogenous, pea 3744
 thioureidobenzoic acids, and endogenous, pea 3744
 applied and endogenous
 citrus 2407
 grapevine 592
 melon (cantaloup and musk) 1199
 pea 2067
 auxin, non-auxinic chemicals, bean (*Phaseolus*) 8678
 BA
 GA application
 chrysanthemum 2928
 peach 2637
 IAA application, chrysanthemum 2928
 TIBA application, *Kalanchoe* spp. 2976
 boron nutrition, aminozide, tagetes 5416
 bromodeoxyuridine, deoxyuridine application, tomato 3812
 calcium sprays, bitter pit, apple disorders 1796

Growth substances *contd.*interaction *contd.*

- 3-carboxy-2-pyridones, GA application, vegetables 3334
 chlormequat
 GA application
 bedding plants 6987
 Cyamopsis tetragonoloba 2808
 DPX 1840
 ethephon application, cucumber and gherkin 5968
 ethylene application, cucumber and gherkin 5968
 2,4-D, BA application, pea 2065
 endothal, ethephon application, bean (*Phaseolus*) 4481
 enzyme activity, rose 1395
 ethephon
 DPX 1840 application, cucumber and gherkin 5968
 GA application, citrus 2407
 ethionine, NAA application, *Cymbidium* spp. 6209
 ethylene, cycloheximide, calamondin 8084
 5-fluorodeoxyuridine, thymidine application, mustard 7074
 GA
 abscisic acid application
 hemp (*Cannabis*) 3056
 ivy 6217
 BA application
 chrysanthemum 2928
 peach 2637
 3-carboxy-2-pyridones application, vegetables 3334
 chlormequat application
 bedding plants 6987
 Cyamopsis tetragonoloba 2808
 IAA application
 bean (*Phaseolus*) 5994
 chrysanthemum 2928
 SADH application, melon (cantaloup and musk) 1199
 TIBA application, *Kalanchoe* spp. 2976
 tryptophan application, pea 3747
 2,4,5-T application, apricot 7425
 IAA
 ethephon application, lettuce 3647
 GA application 3748
 bean (*Phaseolus*) 5994
 kinetin application
 bean (*Phaseolus*) 5994
 cuttings, ornamental plants 7886
 lettuce 3647
 malformin application, bean (*Phaseolus*) 3721
 tryptophan application, pea 3747
 kinetin
 GA application, bean (*Phaseolus*) 5994
 IAA application, cuttings, ornamental plants 7886
 light
 bean (*Phaseolus*) 195
 chlormequat, tomato, annual report, Irish Republic 5150
 coleus 1375
 IAA, cuttings, ornamental plants 7886
 intensity, apple 1731
 kinetin, cuttings, ornamental plants 7886
 morning glory 1339
 serine, bean (*Phaseolus*) 4482
 malformin, IAA application, bean (*Phaseolus*) 3721
 morphactins, NAA + BA application, apple 8400
 NAA
 ethephon application, lettuce 3647
 kinetin application, lettuce 3647
 TIBA application, *Kalanchoe* spp. 2976
 nitrogen nutrition, GA, bean (*Phaseolus*) 7718
 nucleotides, pea 1237
 nutrition, poinsettia 1389
 phosphorus nutrition, pea 2068
 photoperiodism
 cycloheximide, impatiens 7883
 GA, impatiens 7883

Growth substances *contd.*interaction *contd.*

- potassium nutrition, lettuce 8607
 proteins, GA, pea 6016
 relative humidity, orange 5572
 rootstocks, GA, apple 4220
 SADH, GA application, melon (cantaloup and musk) 1199
 tannins
 GA
 cucumber and gherkin 2825
 pea 2825
 IAA, cucumber and gherkin 2825
 temperature
 ethephon, tomato 3813
 GA, tissue culture,
 artichoke, jerusalem 8597
 NAA, tissue culture,
 artichoke, jerusalem 8597
 orange 5572
 thymidine, 5-fluorodeoxyuridine application, mustard 7074
 TIBA
 BA application, *Kalanchoe* spp. 2976
 GA application, *Kalanchoe* spp. 2976
 NAA application, *Kalanchoe* spp. 2976
 tryptophan application
 GA, pea 3747
 IAA, pea 3747
 internode length
 brassins
 bean (*Phaseolus*) 3720
 Malus spp. 4726
 chlormequat, grapevine 1125
 GA, melon (cantaloup and musk) 1199
 SADH, melon (cantaloup and musk) 1199
 juvenility
 abscisic acid, ivy 6217
 aminozide, ivy 6217
 AMO-1618, *Ipomoea* spp. 6151
 chlormequat, *Ipomoea* spp. 6151
 GA
 Ipomoea spp. 6151
 ivy 6217
 latex
 production
 ethephon
 papaw 7216
 rubber 3255, 9217
 leaf
 abscission
 abscisic acid, bean (*Phaseolus*) 2035
 cycloheximide
 olive 6378
 orange 2406, 3147, 5572
 2,4-D, orange 2406
 endothal, bean (*Phaseolus*) 4481
 erythorbic acid, orange 5572
 ethephon
 bean (*Phaseolus*) 4481
 orange 2406
 peach 2643
 fatty acid methyl esters, azalea 7044
 IAA, bean (*Phaseolus*) 2035
 carbohydrates content
 aminozide, grapevine 8569
 chlormequat, grapevine 8569
 MH, grapevine 8569
 phosfon D, grapevine 8569
 TIBA, grapevine 8569
 chlorophyll
 content
 aminozide, gloxinia 6176
 chlormequat, grapevine 1125
 colour, chlormequat, geranium 2196
 development
 BA, petunia 7871
 2,4-D, petunia 7871
 IAA, petunia 7871
 kinetin, petunia 7871
 NAA, petunia 7871
 zeatin, petunia 7871
 drop
 cycloheximide, olive 7166
 ethephon 7166
 injury, fatty acid methyl esters, azalea 7044

Growth substances *contd.*

- leaf *contd.*
 - morphology
 - 2,4-D
 - apricot 6613
 - peach 6613
 - MH
 - apricot 6613
 - peach 6613
 - NAA
 - apricot 6613
 - peach 6613
 - 2,4,5-T
 - apricot 6613
 - peach 6613
 - movements, IAA, bean (*Phaseolus*) 6852
 - nutrients content
 - aminozide, grapevine 8569
 - chlormequat, grapevine 2727, 8569
 - MH, grapevine 8569
 - Phosphon D, grapevine 8569
 - TIBA, grapevine 8569
 - removal
 - ethephon
 - hazel 5024
 - tree fruits 6511, 7314
 - senescence 4940
 - BA, bean (*Phaseolus*) 4482
 - benzimidazole, *Tabernaemontana* spp. 8969
 - chlormequat, *Tabernaemontana* spp. 8969
 - cyclohexamide, bean (*Phaseolus*) 4482
 - ethephon, tomato 8798
 - GA
 - eggplant 671
 - lettuce 1978
 - Tabernaemontana* spp. 8969
 - tomato 1297
 - IBA, *Tabernaemontana* spp. 8969
 - kinetin, eggplant 671
 - kinin, lettuce 1978
 - MH, tomato 1297
 - serine, bean (*Phaseolus*) 4482
 - urea cytokinins, radish 8640
 - size
 - chlormequat, grapevine 1125
 - ethephon, radish 7668
 - GA, lily 1362
 - metabolism
 - abscisic acid
 - lettuce 8609
 - tissue culture, bean (*Phaseolus*) 2803
 - abscisic acid derivatives, tissue culture, bean (*Phaseolus*) 2804
 - α -decalylacetic acid, coleus 3900
 - GA, morning glory 1339
 - IAA
 - bean (*Phaseolus*) 6869, 8696
 - cherry 8442
 - pea 6869
 - tomato 2127
 - indole3-acetaldoxime
 - ornamental plants 5898
 - vegetables 5898
 - NAA, coleus 3900
 - NAA translocation, DPX1840, pea 2824
 - nematode relationships
 - chlrofluoreneol, tomato 8785
 - ethephon, tomato 8785
 - Phosphon-D, tomato 8785
 - nitrates, absorption, amino acids, pea 4509
 - nucleic acids
 - biosynthesis
 - 5-fluorodeoxyuridine, mustard 3942
 - growth substances 4776
 - inhibition, MH, pea 3751
 - pea 221
 - content
 - chlormequat, pea 4500
 - 2,4-D, pea 4500
 - TIBA, pea 4500
 - metabolism
 - cucumber 151
 - GA, pea 6012
 - kale 151
 - nut, drop, ethephon, hazel 7437
 - nutrient absorption
 - aminozide, tomato 6094

Growth substances *contd.*

- nutrient absorption *contd.*
 - benzyladenine, vegetables, tissue culture 1956
 - GA, tomato 6094
 - kinetin, vegetables, tissue culture 1956
- oestrogens
 - content
 - abscisic acid, bean (*Phaseolus*) 5260
 - kinetin, bean (*Phaseolus*) 5260
 - offshoots, treatment, IBA, date 8106
 - organic acids
 - content
 - aminozide, tomato 5361
 - GA, tomato 5361
 - Orobancha* spp., control, MH, watermelon 5210
- ozone injury
 - prevention
 - aminozide, petunia 6152
 - ancymidol, poinsettia 8946
 - chlormequat, poinsettia 8946
 - Phosfon-D, petunia 6152
- pest control
 - Aphis pomi*, aminozide, apple 4214
 - Trialeurodes vaporariorum*, aminozide, petunia 3850
 - phloem, formation, GA, grapevine 4354
 - phosphorus, metabolism, GA, pea 3746
 - photosynthates, translocation, BA, grapevine 8567
 - photosynthesis
 - abscisic acid, strawberry 5819
 - cytoquinine active compounds, bean (*Phaseolus*) 2799
 - pigments
 - biosynthesis
 - Actinomycin D, *Cymbidium* spp. 6209
 - cycloheximide, *Cymbidium* spp. 6209
 - 2,4-D, rose 1394
 - ethephon, cherry 2691
 - ethionine, *Cymbidium* spp. 6209
 - inhibition, PRB-8, cress 8986
 - NAA, *Cymbidium* spp. 6209
 - orthochlorophenoxyacetic acid, orchids 7029
 - rose 1395
 - trisporic acid, pea 7738
 - pinching
 - BA, poinsettia 6218
 - chlormequat, pot plants 5393
 - ethephon, poinsettia 6218
 - methyl esters of fatty acids, azalea 7043
 - PBA, poinsettia 6218
 - pot plants, review 6135
 - TIBA, poinsettia 6218
- plant
 - anatomy
 - chlormequat, coreopsis 5413
 - GA, coreopsis 5413
 - composition
 - aminozide
 - bean (*Phaseolus*) 2031
 - chrysanthemum 2031
 - butylammonium bromides
 - bean (*Phaseolus*) 2031
 - chrysanthemum 2031
 - chlormequat
 - bean (*Phaseolus*) 2031
 - chrysanthemum 2031
 - poinsettia, annual report, USA 1441, 6129
 - GA
 - cabbage, chinese 1179
 - cauliflower and broccoli 7660
 - lettuce 6789
 - sugar cane 1649
 - morphology
 - IAA, walnut 2663
 - MH, walnut 2663
 - quality, 2,4-D, cabbage 8616
 - storage, benomyl, rose, annual report, UK 2153
- weight
 - 2,4-D
 - cabbage 8616
 - lettuce 609
 - GA
 - cabbage 8616
 - cauliflower and broccoli 7660

Growth substances *contd.*

- plant *contd.*
 - weight *contd.*
 - GA *contd.*
 - lettuce 5914
 - IAA, lettuce 609
 - NOA, cabbage 8616
- pod
 - number
 - 5-chloro,2-thenyl, tri-n-butyl-phosphoniumchloride, bean (*Phaseolus*) 1221
 - CTBP, bean (*Phaseolus*) 5993
 - pollen destruction, FW450, vegetables, annual report, Belgium 1131
 - potassium, absorption, abscisic acid, bean (*Vicia*) 4494
 - practical applications, ethephon 3335
- proteins
 - biosynthesis
 - ethephon, fig 1008
 - inhibition, chloramphenicol, grapevine 1927
 - content
 - chlormequat, bean (*Phaseolus*) 5258
 - GA, orange 8089
 - metabolism
 - cucumber and gherkin 151
 - kale 151
- pruning
 - aminozide, apple 1778, 3396, 5719, 6576
 - fatty acid methyl esters, azalea 7044
 - NAA
 - annual report, UK 8317
 - apple 2588
 - Off-Shoot O, apple 2576
 - Off-Shoot-O, azalea 2286
 - Off-Shoot T, apple 2576
 - TIBA, apple 2588
- redox processes
 - 2,4-FET, tomato 5357
 - 2,4,5-FET, tomato 5357
 - 2,4,5-T, tomato 5357
- residues
 - chlormequat, azalea 7944
 - cyclohexamide, olive 1520
 - determination, MH, vegetables, annual report, Canada 2734
 - fruit, chlormequat, tomato 5198
- plant
 - chlormequat, vegetables 5198
 - 2,4-D, tomato 2104
 - 2,4,5-T, tomato 2104
 - report, German Federal Republic 8284
- SADH
 - apple 480, 5001
 - chinese gooseberry 480
- respiration
 - abscisic acid, strawberry 5819
 - chlormequat, apple 1786
 - cyclohexamide, geranium 274
 - fruit
 - ethephon, mandarin and tangerine 3149
 - IAA, apple 1772, 5003
 - TIBA, apple 5003
 - trisporic acid, pea 7738
- tuber
 - 2,4-D, artichoke, jerusalem 8599
 - GA, artichoke, jerusalem 8599
 - kinetin, artichoke, jerusalem 8599
- responses
 - abscisic acid 1704
 - 1-amino-2-nitrocyclopentane-1-carboxylic acid, vegetables, annual report, USA 4368
- aminozide
 - Abutilon* spp., annual report, UK 2155
 - apple 1776
 - annual report, German Federal Republic 7310
 - brussels sprouts 5932
 - fruit trees and plants 3360, 8328
 - annual report, Canada 5696
 - geranium 6150
 - hop, annual report, UK 3954
 - hydrangea 8842
 - plum, annual report, Belgium 6503
 - pome fruits, annual report, Belgium 2517
 - tomato 6099

Growth substances *contd.*responses *contd.*

- apple, annual report, UK 8317
 auxins 1704
 azathymine, tomato 7807
 benzyladenine, tomato 5359
 brassins, bean (*Phaseolus*) 2801
 CCC, bean (*Phaseolus*) 5257
 chlormequat 1704
Abutilon spp., annual report, UK 2155
 apple 1776
 apricot 8329
 cherry 8329
Euphorbia fulgens 8842
 fruit trees and plants 8328
 geranium 6150
 grapevine, annual report, German Federal Republic 5072
Lonicera spp. 8965
 myrobalan 8329
 okra 7758
 pea 1238, 4500
 pear 8468
 annual report, Netherlands 5697
 phosphorus nutrition, pea 2068
 plum, annual report, Belgium 6503
 poinsettia, annual report, UK 4606
 pome fruits, annual report, Belgium 2517
Prunus mahaleb 8329
 review 8310
 cytokinins 1704
 dwarf plants, IAA, nasturtium 4647
 2,4-D
 pea 4500
 rubber 8184
 ethephon
 fruit trees and plants 8328
 rubber 8184
 GA
Ammi spp. 9019
 artichoke, globe 3632
Atropa belladonna 7100
 bean (*Phaseolus*) 5994
Dipsacus spp. 7117
 fruit trees and plants 4148
 hop, annual report, UK 3954
 okra 7755
 pea 1238
 pear, annual report, Netherlands 5697
 sugar cane 4104
 tomato 5359, 8794
 vegetables 4148
 gibberellins 1704
 review 2512
 hydroquinone
 bean (*Phaseolus*) 3750
 pea 3750
 IAA
 bean (*Phaseolus*) 5994
 onion 8743
 pea 1238
 tomato 8794
 IBA
 onion 8743
 tomato 6101
 kinetin, bean (*Phaseolus*) 5994
 MH
 apricot 7424
 okra 7755
 radish 5941
 morphactins, fruit trees and plants 8328
 NAA
 hop, annual report, UK 3954
 onion 8743
 tomato 6101
 orthonil, scorzonera 1160
 Phosphon, phosphorus nutrition, pea 2068
 pot plants, review 6135
 resorcin
 bean (*Phaseolus*) 3750
 pea 3750
 review 4939
 SADH, pea 1238
 strawberry, GA 3540
 TIBA
 fruit trees and plants 8328
 pea 4500

Growth substances *contd.*responses *contd.*

- 2,4,5-TP, oil palm, annual report, Nigeria 9181
 Triton X-100
 cress 7665
 mustard 7665
 vanillin
 bean (*Phaseolus*) 3750
 pea 3750
 various, plum, annual report, UK 8318
 vegetables, review 7611
 xanthoxin 1704
 retardants
 aminozide
 apple 4996, 6577, 8398
Asclepias spp. 7952
 azalea 7944
 bedding plants 6136
 campanula 6160
 ground cover plants 6157
 oleander 7059
 pear 4279, 6577
 ancymidol
 bedding plants 6136
 ground cover plants 6157
Hibiscus spp. 7052
 ornamental plants 1326
 apple, annual report, UK 903
 3-carboxy-2-pyridones
 lawns and sports turf 3334
 privet 3334
 chlorturecol, lawns and sports turf 2263
 chlormequat
 apple 4996, 6577, 8398
 azalea 7944
 bedding plants 6136
 campanula 6160
Hibiscus spp. 7052
 lawns and sports turf 2263
 ornamental trees and shrubs 6212
 pear 4279, 6577
 poinsettia 6219
 DMC, azalea 7944
 ethephon, bedding plants 6136
 ethyl hydrogen 1-propylphosphonate, privet 7958
 F529, azalea 7944
 MH
 ground cover plants 6157
 lawns and sports turf 2263
 privet 7958
 morphactins, chrysanthemum 8864
 Phosphon D, apple 8398
 1-propylphosphonic acid, privet 7958
 Pydanon
 lettuce, annual report, German Federal Republic 7598
 ornamental plants 2163
 annual report, German Federal Republic 7843
 review
Hibiscus spp. 7846
 pot plants 7846
 RH 531, ground cover plants 6157
 various, review 6502
 vegetable oils, apple 4996
 retardation
 ancymidol, poinsettia 8946
 chlormequat, poinsettia 8946
 review 2512
 rhizome
 treatment
 IAA, iris 5426
 Rhiourea, iris 5426
 rhizome bud, number, MH, iris 5426
 rhizosphere, micro-organisms, population, chlorturecol-n-hexylester, capsicum 2849
 root
 formation
 2,4-D, bean (*Phaseolus*) 190
 IAA, bean (*Phaseolus*) 190
 IBA, almond 5708
 NAA
 almond 5708
 bean (*Phaseolus*) 190
 formation on cuttings
 GA, pea 3747
 IAA, pea 3747

Growth substances *contd.*root *contd.*

- growth
 bromodeoxyuridine, deoxyuridine, tomato 3812
 chlormequat, coreopsis 5413
 GA, coreopsis 5413
 IAA
Kalanchoe spp. 5455
 pea 6010-6011
 inhibition
 IAA, pea 3749
 TIBA, tomato 248
 size, ethephon, radish 7668
 storage
 BA, carrot 1308
 shoot growth
 aminozide, radish 5942
 MH, radish 5942
 treatment
 heteroauxin, tomato 7808
 SRV, tomato 7808
 root nodule, formation, Ethrel, pea 207
 rooting
 IBA, rubber 7228
 shoot-tip, NAA, tissue culture, oil palm 1604
 rootstocks, treatment, GA, pecan 2654
 runner
 development, GA, strawberry 6709
 formation
 aminozide, strawberry 6708
 chlormequat, strawberry 6708
 production, GA, strawberry 6710
 seed
 abortion, MH, apricot 7424
 development, ethephon, cucumber and gherkin 5969
 germination
 ethephon, onion 4525
 inhibition
 GA, grapevine 3566
 IAA, lettuce 3647
 NAA, lettuce 3647
 production
 2,4-D, *Plantago ovata* 9046
 ethephon
 cucurbits 5231
 onion 4525
 GA, lettuce 5914
 IAA, *Plantago ovata* 9046
 IBA, *Plantago ovata* 9046
 MH, carrot 6947
 NAA, *Plantago ovata* 9046
 quality, MH, carrot 6947
 size, MH, carrot 6947
 treatment
 abscisic acid, peach 2637
 BA, peach 2637
 6-benzylaminopurine, *Cyamopsis tetragonoloba* 2808
 CCC, lettuce 137
 chlormequat, *Cyamopsis tetragonoloba* 2808
 cycloheximide, squash 5208
 ethephon 3647
 6-furfurylaminopurine, *Cyamopsis tetragonoloba* 2808
 GA
 citrus 1468
Cyamopsis tetragonoloba 2808
 eggplant 3783
 grapevine 3566, 6718
 pea 4498
 peach 2637
Rauwolfia spp. 352
 IAA 3647
 eggplant 3783
 pea 4498
 kinetin 3647
 grapevine 6718
 pea 4498
 NAA 3647
 eggplant 3783
 N⁶-benzyladenine, celery 1309
 review 4374
 weight, brassins, bean (*Phaseolus*) 2801
 seedling
 growth
 GA, *Cyamopsis tetragonoloba* 2808
 inhibition
 asparagusic acid, lettuce 4517

Growth substances *contd.*seedling *contd.*growth *contd.*inhibition *contd.*

IBA, almond 5708

NAA, almond 5708

seedlings, treatment, GA, pear 5788

shoot

anatomy

BA, apple 8400

GA, apple 8400

morphactins, apple 8400

NAA, apple 8400

development

BA, petunia 7871

2,4-D, petunia 7871

IAA, petunia 7871

kinetin, petunia 7871

NAA, petunia 7871

zeatin, petunia 7871

growth

aminozide

apple 3401

grapevine 2730, 4357

pear 1840

auxins, pea 2822

chlorflurenol, marigold 7879

chlormequat

cacao 8137

Clerodendron spp. 7953

grapevine 6764

annual report, Australia 550

pear 1840

cytokinin, tissue culture, apple 3419

ethephon

cucumber and gherkin 5228

pear 1840

GA

cacao 8137

Clerodendron spp. 7953*Kalanchoe* spp. 5455

pea 2823

pear 1840

tea 4901

tissue culture, apple 3419

watercress 3676

IAA, pea 6868

kinetin, tomato 7807

thymine, tomato 7807

TIBA, pear 1840

morphology

2,4-D

apricot 6613

peach 6613

MH

apricot 6613

peach 6613

NAA

apricot 6613

peach 6613

2,4,5-T

apricot 6613

peach 6613

shoot-tip, injury, 2,4-D, bean (*Phaseolus*)

7717

shuck loosening, ethephon, pecan 90

sodium, absorption, kinetin, bean

(*Phaseolus*) 2027stalk, length, GA, *Gloriosa* spp., annual

report, Austria 265

stem

elongation

IAA, pea 221

indol-3-yl-acetamide, pea 221

indol-3-yl-butyric acid, pea 221

naphth-1-yl-acetamide, pea 221

naph-2-yl-oxyacetic acid, pea 221

stomata

movements

abscisic acid

bean (*Phaseolus*) 194

rose 194

aminozide 6093

chinosol 6093

chlormequat 6093

phenyl mercuric acetate 6093

various, watermelon 8657

stopping

aminozide

brussels sprouts 5932

annual report, UK 3610

brussels sprouts, annual report, UK

598

Growth substances *contd.*

storage disorders

2,4-D, pear 3500

ethephon, apple 976

GA, apple 1797

sucker

control

Off-shoot-O, tree fruits, annual

report, UK 8318

Off-shoot-T, tree fruits, annual

report, UK 8318

sucrose, content, ethephon, radish 7668

sugars

content

GA

aminozide, tomato 5361

sugar cane, annual report, USA

9221

metabolism, 2,4-D, pea 2058

sulphur dioxide injury

prevention

ancymidol, poinsettia 8946

chlormequat, poinsettia 8946

testing, spray cabinet 8

tillering

chlorflurecol, lawns and sports turf

2263

chlormequat, lawns and sports turf

2263

tissue culture

GA, aquilegia 3856

IAA, aquilegia 3856

kinetin, aquilegia 3856

translocation

aminozide, chrysanthemum 4630

anthesins, *Perilla* spp. 4645BA, *Kalanchoe* spp. 29762,4-D, bean (*Phaseolus*) 190 α -decalylacetic acid, coleus 3900gibberellins, *Perilla* spp. 4645

heteroauxin 1320

IAA

bean (*Phaseolus*) 190, 2795, 3714,

7712, 8696

bean (*Vicia*) 7726*Cleome hassleriana* 7881

coleus 1375, 4676, 5453

pea 216, 2821, 4513, 5279

Kalanchoe spp. 3902

kinetin, pea 216

MH, apricot 7424

NAA

bean (*Phaseolus*) 190

coleus 3900

Kalanchoe spp. 2976

orange 2401

SADH, bean (*Phaseolus*) 1218TIBA, bean (*Phaseolus*) 37142,4,5-T, bean (*Phaseolus*) 7712

tuber

development

abscisic acid, dahlia 4653

aminozide, dahlia 4653

ethephon, dahlia 4653

sprouting

GA, begonia 730, 4649

morphactins, begonia 730

uses, review 4939

vascular development

GA, peach 5039

IAA, peach 5039

virus

control 888

thiouracil, papaw 401

vitamin B, content, 2,4-D, bean

(*Phaseolus*) 7717

water relations

chlormequat, tomato 6100

2,4-FET, tomato 6102

2,4,5-FET, tomato 6102

2,4,5-T, tomato 6102

wound healing

IAA, fruit trees and plants 8327

IBA, fruit trees and plants 8327

xylem

formation

cytokinin, lettuce 7635

IAA, lettuce 7635

xylem formation, 2,4-D, pea 4511

Grubbing

arboricides

c chloramp, grapevine 581

Dianat, grapevine 581

Grubbing *contd.*

equipment, tea 854

shade trees, tea, annual report, India

1657

Guava

annual report, India 4034

economics, India 5624

fungicides, injury, copper 4063

growing

USA 1531

Venezuela 8119

pruning and training 1590

report, USA 6382

storage, dips, fruit ripening, growth

substances 9176

Guava diseases, *Phytophthora parasitica*

4063

Guava disorders

chlorosis

boron nutrition 8161

copper nutrition 9173

Guava flower, biology 3209

Guava fruit

ascorbic acid, content, rootstocks 5626

composition, boron nutrition 8161

firmness 3174

quality

copper nutrition 9173

pruning and training 1590

rootstocks 5626

ripening

bio-chemistry 3174

boron nutrition 8161

copper nutrition 9173

growth substances 9176

size

boron nutrition 8161

copper nutrition 9173

weight, growth substances 9176

Guava growth substances

endogenous, seed 9175

fruit

ripening

2,4-D 9176

GA 9176

MH 9176

2,4,5-T 9176

weight

2,4-D 9176

GA 9176

MH 9176

2,4,5-T 9176

Guava leaf

carbohydrates, content, boron nutrition

8161

nitrogen, content, boron nutrition 8161

number

boron nutrition 8161

copper nutrition 9173

size

boron nutrition 8161

copper nutrition 9173

Guava nutrition

boron 8161

copper 9173

Guava pests

Helopeltis antonii, varietal resistance 838

parakeets, damage 9174

review, Bolivia 5671

Guava propagation

air-layering, treatment, growth substances

8160

under mist 5677

Guava rootstocks

comparative trials

Allahabad Safeda 5626

Florida seedling 5626

Psidium spp. 5626

seedless 5626

Guava soil

salinity

chlorine 2161

plant, tolerance 2161

sodium 2161

Guava varieties, comparative trials, Sri

Lanka 5625

Guignardia bidwellii, grapevine diseases,

annual report, USA 7490

G. citricarpa

citrus diseases 797

annual report, Australia 4782

Guilielma gasipaes

- fruit
- fats 7272
- proteins 7272
- growing, Costa Rica 1666

Gum, gardenia, composition, flavones 766

Gum plants, *Loxopterygium huasango* 4781

Gusmania spp., trichome, anatomy, morphology 6199

Guzmania spp., photosynthesis 305

Gymnosporangium spp., pear diseases, annual report, Canada 3370

Gypsophila diseases, storage rots, annual report, USA 8834

Gyromitra esculenta, growing, USSR 3830

Haemagglutinin

- applied
- bulb, onion 2798
- seed, bean (*Phaseolus*) 2798
- seedling, bean (*Phaseolus*) 2798

Haemanthus albillos

- enzyme activity, pollen germination 8910
- pollen, germination, enzyme activity 8910

Hail

- damage
- prevention
- chemical treatment of clouds 6490
- fruit trees and plants 3393
- leaf cover, grapevine 5836
- nets
- apple 8355
- economics
- apple 8356
- grapevine 8356
- grapevine 8355
- tea, annual report, Kenya 7264
- tulip 2256
- suppression, annual report, USA 3300

Hainesia lythri, storage rots, strawberry diseases 1078

Hamatocactus satispinus, flower, opening-closing, rhythms 6201

Hansenella spp., pineapple pests 4074

Hapithus agitator, citrus pests, annual report, USA 8051

Hares

- repellants, varietal preference, hop pests 7095
- repellents, TMTD, application, in paint 1730

Harungana spp., leaf, composition, pigments 335

Harvesting

- biennial, black currant 3519
- burning
- cane deterioration, sugar cane 7260
- sugar cane 7259
- carbohydrates content, sugar cane 9268
- chemicals to aid, review, olive 4825
- containers
- polystyrene, economics, apple 980
- trays, liners, pear 1033
- desiccation
- chemical, neo-decanoic acid mixture, onion 4526
- herbicides, pea, annual report, UK 3611
- deterioration, sugar cane 6452, 7259-7260
- economics, brussels sprouts 8635
- fruit, loosening, chemical, orange 4011
- labour requirements
- peach 6627
- sugar cane 5656
- mechanical
- air separator, coffee 1587
- asparagus, annual report, USA 7601
- bean (*Phaseolus*), annual report, UK 3611
- bibliography
- apple 7409
- berry fruits 8483
- black currant 3519
- branch
- injury
- catching frames, apple 2595
- shakers, apple 2595
- brussels sprouts 8635
- annual report, UK 3614
- bulbs, injury, annual report, Netherlands 2219

Harvesting contd.

- mechanical contd.
- capsicum 4542
- catching frames
- apple 54, 977
- branch injury, apple 2595
- fruit injury, apple 2595
- fruit trees and plants 2511, 2531
- guava, report, USA 6382
- chemical defoliation, annual report, Irish Republic, bean (*Phaseolus*) 5150
- cherry 1005
- annual report, Belgium 6503
- citrus, annual report, USA 2375
- cucumber and gherkin 1200, 1204
- economics
- grapevine 5144
- olive 2426
- equipment
- apple, annual report, Canada 5695
- apple 457
- black currant 2672
- brussels sprouts 2764, 4434
- cauliflower and broccoli 5937-5938
- cherry 457
- fruit trees and plants 8331
- for lodged cane, sugar cane 8257
- mushroom 7840
- peach 457, 1831
- pear 457
- plum 457
- pome fruits 8411
- strawberry 2672
- sugar cane 8258
- tea 3285
- tomato 2888, 3819
- types compared, hop 5513
- vegetables, annual report, Netherlands 8581
- flowers
- annual report, Netherlands 1314
- gladiolus 2945
- fruit
- annual report, Netherlands 23, 100
- injury
- catching frames, apple 2595
- shakers
- apple 2595, 2633
- cherry 2633
- loosening
- ascorbic acid
- apple 975
- cherry 8445
- cherry 500
- citrus 4012
- growth substances
- annual report, USA 8319
- apple 975
- black currant 1858
- cherry 501, 8445
- annual report, Belgium 6503
- ethephon, cherry 2633
- olive 1521, 7166, 9114
- orange 3148
- peach, annual report, USA 3348
- olive 2426
- review, olive 2423
- small fruits, annual report, UK 3515
- grapevine 4359
- annual report
- Australia 4296
- German Federal Republic 5072
- growth substances to aid, annual report, Netherlands 23, 100
- Hydraulic machine, black currant 8487
- labour management, hop 3960
- mobile platform, apple 3429
- nets
- coffee 1587
- macadamia, report, USA 6324
- olive 1522
- papaw 6415
- pecan, annual report, USA 1706
- peduncle length, grapevine 1126, 1895
- pest incidence, black currant 1049
- planting, spacing, spinach 4391
- Plukpony, apple 4953
- pneumatic suction
- grapevine 819

Harvesting contd.

- mechanical contd.
- pneumatic suction contd.
- olive 819
- for processing, vegetables 5900
- pruning and training
- grapevine 5143, 5845
- olive 2425
- plum 1848
- raspberry, annual report, Canada 2669
- review
- currants 7502
- fruit trees and plants 1717
- grapevine 6766
- sugar cane 6450
- root, injury, carrot 6114
- shakers
- almond 4169
- apple 978
- black currant 5804
- branch injury, apple 2595
- damson 7480
- fruit injury
- apple 2595, 2633
- cherry 2633
- grapevine 570, 819, 5143
- annual report, Italy 6714
- guava, report, USA 6382
- hazel 2635
- olive 819, 1521, 2425, 6380
- orange 4011, 4013
- raspberry 6684
- tree fruits, annual report, Canada 2515
- small fruits 1046
- annual report, UK 3514
- strawberry 549
- annual report, USA 6692
- tea, annual report, USA 1530
- tomato 2889
- tractor-drawn frame, peach 4267
- trash removal, sugar cane 8260
- tree fruits, annual report, UK 5752
- vegetables
- annual report
- Netherlands 1132
- UK 4365
- USA 1130, 4367-4368
- vibrating comb, olive 3167
- washing machine, coffee 1587
- windfalls, apple 3430
- windrower, sugar cane 6453
- methods compared
- brussels sprouts 8635
- onion 7752
- mobile platform
- apple 6588
- fruit trees and plants 1716
- strawberry 1891
- once-over
- cauliflower and broccoli 5186
- strawberry 8524
- vegetables 5923
- shuck loosening, growth substances, ethephon, pecan 90
- systems, economics, lemon 2408
- time of
- Angelica* spp., medicinal use 3067
- cane maturity
- analysis, sugar cane 7258
- sampling, sugar cane 7258
- cane quality, sugar cane 9266
- forecasting, apple, annual report, UK 8317
- fruit colour chart, apple 1787-1788
- fruit maturity tests
- apple 1789-1790
- pear 1789-1790
- fruit organic acids, pineapple 9203
- fruit ripening, chinese gooseberry 4303
- nitrogen nutrition
- sugar cane 1626
- tomato 6910
- plant maturity criteria, cauliflower and broccoli 4433
- planting, time, leek 4519
- raspberry 5811
- ratoon age, sucrose content, sugar cane 7256
- seedling storage, cauliflower and broccoli 7638
- sugar cane 7257

- Haworthia spp.**
tissue culture
flower 2271
growth substances, treatment 2271
media 2271
- Hawthorn**, as a windbreak, disease
incidence, pear 85
- Hawthorn diseases**
Erwinia amylovora
alternative hosts 6519
incidence 4274
- Hazel**
amino acids, metabolism, mycorrhiza 7435
defoliation, growth substances, ethephon 5024
growing, USSR 4299
harvesting, mechanical, shakers 2635
mycorrhiza, amino acids, metabolism 7435
nucleic acids, extraction 3337
pollen, production, temperature 3454
sterols, choline, content 4954
temperature, sums, pollen, production 3454
winter hardiness, varietal differences 5025
- Hazel flower**
biology 7436
bud initiation, varietal differences 5025
development 5025
distribution 7436
- Hazel growth substances**
endogenous, nut 8448
leaf, removal, ethephon 5024
nut, drop, ethephon 7437
- Hazel nut**
drop, growth substances 7437
storage, dormancy 8448
- Hazel seed**, dormancy, breaking, growth substances, endogenous 8448
- Hazel varieties**
comparative studies, Hungary 6621
Enna 502
Northampton 3453
nut, quality 3452
Yugoslavia 3452
- Heat**, resistance, rootstock-scion relationships, apple 8354
- Heat treatment**
bacteria control
bulb, hyacinth 2242, 4656
sett, sugar cane 8226
clonal selection, strawberry 5097
equipment 1690
sugar cane 7242
fungus control
bean, bean (*Phaseolus*) 8706
bulb, lily 7902
fruit
cherry 6619
eggplant 6051
papaw 4072
peach 1832, 6619
plant, bean (*Phaseolus*) 5251
sugar cane 8230
grapevine, annual report, Italy 6714
mite control, runners, strawberry 8516
nematode control
bulb, lily 7902
bulbs, tulip 2260
rhizome, banana 5605
pest control, sett, sugar cane 9256
phytotoxicity, banana, annual report, Western Samoa 8122
virus control
apple, annual report, German Federal Republic 6505
chrysanthemum 2190
citrus 7141
hydrangea 4722, 7054
lettuce 7631
mushroom 7833
shoot-tips, carnation 2920
strawberry 7536
sugar cane 1634, 7240, 8223, 8230, 8255, 9252
- Hebe spp.**, growing, peat, nutrition, nitrogen 8941
- Hedera spp.**
growing, as an intercrop, *Strelitzia* spp. 8879
- Hedera spp. contd.**
leaf
anthocyanins, content, respiration 8944
colour, respiration 8944
respiration, leaf, colour 8944
- Hedysarum spp.**, glycosides 3051
- Heimia spp.**
alkaloids, extraction from leaves 776
cryogenine biosynthesis 768
- Helenium spp.**
nematicidal principles 283
sapogenins 2942
- Helicotylenchus spp.**
heat treatment, banana pests 5605
population studies, decline association, citrus pests 8078
rhizome dips, banana pests 5605
rubber pests 9215
- Helicoverpa armigera**, citrus pests 4003
- Heliothis armigera**, tomato pests, annual report, India 3607
- H. virescens**, parasites, tomato pests 4430
- H. zea**
parasites, tomato pests 4430
tomato pests, annual report, USA 8585
- Heliothrips haemorrhoidalis**, tung pests 8117
- Heliotropium spp.**, varieties, Iowa 7882
- Helminthosporium incurvatum**, nitrogen nutrition, coconut diseases 9149
- H. sacchari**
histology, sugar cane diseases 424
resistance, sugar cane diseases 8231
- H. sativum**, host enzyme activity, *Poa pratensis*, diseases 740
- H. spp.**, epiphyte, pecan 2653
- Helopeltis antonii**, varietal resistance, guava pests 838
- H. claviger**, cacao pests 2444
- Hemerocallis diseases**, leaf streak, annual report, USA 2152
- Hemerocallis spp.**, breeding and genetics 299
- Hemiberlesia lataniae**, biological control, avocado pests 3983
- H. rapax**, chinese gooseberry pests 5080
- Hemicriconemoides chitwoodi**
hosts, grapevine pests 5132
incidence, grapevine pests 5132
plum pests 5132
rose pests 5132
tomato pests 5132
Vitis spp., pests 5132
- H. mangiferae**, soil treatment, litchi pests 6373
- Hemicycliophora parvana**
control
capsicum pests 6975
tomato pests 6975
- Hemidesmus indicus**, terpenoids 6300
- Hemileia spp.**, fungicides, application, methods, coffee diseases 3206
- H. vastatrix**
biological control, coffee diseases 1580
coffee diseases 396, 836, 1577-1578, 2451, 3316, 4862, 5621, 7194
annual report, East African Community 5617
hybrid resistance, coffee diseases 1569
parasites, *Verticillium* spp., coffee diseases 7194
varietal resistance
coffee diseases 395
annual report
Nigeria 4035
Zambia 8144
- Hemitarsonemus latus**, vegetables, pests 4539
- Hemp (Cannabis)**
alcohols, content 9024
carbohydrates, content 9024
tissue culture
cell suspension
antimicrobial activity 9025
choline 9025
fatty acids, metabolism 8591
phenolic compounds 9025
- Hemp (Cannabis) flower**, sex, growth substances 3056
- Hemp (Cannabis) growth substances**
flower
sex
abscisic acid 3056
Ga 3056
- Hendersonula toruloides**, *Arbutus* spp., diseases, annual report, USA 1315
- Heracleum dissectum**, coumarins 6283
- Herbicides**
A-820, injury, bean (*Phaseolus*) 6777
alachlor, injury, bean (*Phaseolus*) 2018
ametryne
persistence
pineapple 8172
sugar cane 9236
aminotriazole
absorption, bean (*Phaseolus*) 6848
chloroplast, structure, sweet basil 1409
fungus control
Mycogone perniciosa, mushroom 8824
Verticillium malthousei, mushroom 8824
injury
avocado 7121
grapevine 5839
ground cover plants 1323
metabolism, bean (*Phaseolus*) 6848
residues, determination, tomato 7777
amitrole, injury, grapevine 3570
application, irrigation, brassicas 603
asulam, fungus control, *Verticillium malthousei*, mushroom 8824
atrazine
disease incidence, sugar cane 5652
injury
grapevine 6735
Prunus spp. 1041
persistence
pineapple 8172
sugar cane 9236
physiological responses, sugar cane 3256
plant, responses, bean (*Phaseolus*) 5995
proteins, content, bean (*Phaseolus*) 5995
residues, fruit, strawberry 2700
soil nutrient availability, apple 935
soil pH, sugar cane 5652
tolerance, grapevine 5839
benfin, injury, cucumber and gherkin 5209
bensulide, injury, tomato 6904
bentazon, tolerance, pea 8714
Bladex, as mutagen, tradescantia 1346
bromacil
injury
banana 9129
peach 8454
rubber 8180
sisal 7992
testing, bean (*Phaseolus*) 193
bromoxynil, injury, ground cover plants 1323
Butisan
plant, thinning, vegetables 7648
seedling, emergence, cabbage 6795
chlormamben
flower, sex, cucumber and gherkin 8647
injury
aspargus 2827
cucumber and gherkin 626, 628, 2768, 5209
tolerance, cucurbits 623
chlormambenmethyl, injury, tomato 6904
chlorbromuron, injury, carrot 7816
chlorpropham
injury, hyacinth 2947
tolerance, vegetables, ornamental plants 6779
chlorthal, plant responses, bean (*Phaseolus*) 641
chlorthal dimethyl
injury, measurement, onion 1251
residues, fruit, strawberry 546
tolerance
cucurbits 623
onion 5305
chlorthiamid
fruit, ascorbic acid content, gooseberry 1051

Herbicides contd.

- chlorthiamid *contd.*
 injury, grapevine 6735
 residues
 soil 1683
 fruit trees and plants 6542
 CP-8261, injury, bedding plants 2171
 cyanazine, injury, pea 4501
 cycloate, injury, spinach 7618
 Dacnate, injury, oil palm 1601
 Dacthal
 injury, vegetables 8605
 residues
 plant 646
 soil 646
 dalapon
 disease incidence, sugar cane 5652
 flower, sex, cucumber and gherkin 8647
 fungus control, *Verticillium malthousei*, mushroom 8824
 injury
 grapevine 3570
 sugar cane 847
 tropical crops 8134
 residues
 application, methods, vegetables 1949
 soil, strawberry 2699
 soil pH, sugar cane 5652
 tolerance, sugar cane 9239
 dazomet, plant, size, cauliflower and broccoli 7649
 2,4-DB, quality, pea 206
 DCPA
 injury, cucumber and gherkin 5209
 residues, application, methods, vegetables 1949
 2,4-DES, residues, fruit, strawberry 546
 dicamba
 persistence, essential oil plants, fruit trees and plants, vetiver 2495
 toxicity, essential oil plants, fruit trees and plants, vetiver 2495
 dichlobenil
 injury
 apple 4997
 asparagus 2827
 citrus 3989
 container-grown plants 2986
 grapevine 3570
 ornamental plants 8851, 8853
 peach 1819
 raspberry 2685
 trees and shrubs 4614
 interaction, rootstocks, apple 4997
 residues
 soil 1683
 fruit trees and plants 6542
 root, growth, apple 4997
 tolerance, stone fruits 3510
 dichloromate, plant responses, bean (*Phaseolus*) 641
 dichlorprop, injury, lettuce 1967
 difenoxuron, injury, measurement, onion 1251
 dinitroanilines, tolerance, vegetables 1267
 dinoseb
 disease incidence, bean (*Phaseolus*) 8687
 flower, sex, cucumber and gherkin 8647
 injury, melon (cantaloup and musk) 624
 plant responses, bean (*Phaseolus*) 641
 tolerance, cucumber and gherkin 627
 dinoterb, injury, bean (*Phaseolus*) 8683
 diphenamid
 disease incidence, capsicum 2843
 injury
 asparagus 2827
 humidity, tomato 3797
 light intensity, tomato 3797
 tolerance, tomato 4549
 diquat
 application, irrigation, vegetables 6905
 desiccation
 pea, annual report, UK 3611
 seed, germination, pea, annual report, UK 3611
 flowering, control, sugar cane 1651
 residues, vegetables 6905

Herbicides contd.

- diuron
 disease incidence, sugar cane 5652
 fungus control
 Mycogone perniciosa, mushroom 8824
 Verticillium malthousei, mushroom 8824
 injury
 apple 6543
 bean (*Phaseolus*) 3700
 grapevine 3570, 6735
 pecan 5056
 pineapple 8172
 rubber 9208
 sisal 7992
 sugar cane 847, 4886, 8206
 testing, bean (*Phaseolus*) 193
 tree fruits 7357
 tropical crops 8134
 persistence, sugar cane 9236
 residues
 determination, tomato 7777
 soil
 apple 6543
 annual report, Australia 6523
 soil pH, sugar cane 5652
 tolerance
 stone fruits 3510
 sugar cane 4886
 DNOC, injury, shallot 1258
 2,4-DNP
 injury, testing, bean (*Phaseolus*) 193
 respiration, tomato 6922
 2,4-D
 absorption, solar radiation 5283
 decomposition, red currant 7500
 injury
 application methods, sugar cane 7238
 bean (*Vicia*) 4488
 blueberry 8492
 lettuce 1967
 prevention, sugar cane 7238
 sugar cane 9237
 persistence, soil, vegetables 1947
 residues, determination, tree fruits 6514
 tolerance
 grapevine 5839
 sugar cane 7238
 translocation
 bean (*Vicia*) 4488
 red currant 7500
 solar radiation 5283
 EL-179, application, soil, methods, vegetables 680
 endothal
 absorption, lawns and sports turf 5445
 injury, ethylene production, bean (*Phaseolus*) 4483
 metabolism, lawns and sports turf 5445
 translocation, lawns and sports turf 5445
 Eptam, residues, fruit, strawberry 2700
 EPTC
 injury
 azalea 4614
 container-grown plants 2986
 prevention 3660
 plant, responses, bean (*Phaseolus*) 8684
 fenac, tolerance, sugar cane 9239
 fluorodifen, translocation, cucumber 6830
 flurenol, responses, pea 4500
 glyphosate, tree fruits, annual report, UK 8316
 GS-14254
 injury, orange 8065
 persistence, orange 8065
 proteins, content, bean (*Phaseolus*) 5995
 GS-21704, injury, peach 5032
 haloxydine
 chloroplast
 development, radish 5202
 structure, radish 5202
 injury, brussels sprouts 7651
 interaction, fungicides, shallot 1258

Herbicides contd.

- linuron
 injury
 bean (*Phaseolus*) 3700
 capsicum 667
 Carpobrotus spp. 1323
 carrot 7816
 persistence, sugar cane 8206
 MCPA
 injury, lettuce 1967
 residues, determination, tomato 7777
 MCPB, quality, pea 206
 MCPP, injury, ground cover plants 1323
 mecoprop, injury, lettuce 1967
 menthabenzthiazuron, tolerance, pea 8714
 Mesoramil, seedling, emergence, cabbage 6795
 metobromuron
 injury
 bean (*Phaseolus*) 170
 tomato 7776
 tree fruits 7357
 MH, residues, determination, vegetables, annual report, Canada 2734
 mixtures, injury, oil palm 8166
 monolinuron, yield increase, grapevine 1902
 monuron
 enzyme activity, tea 8265
 injury
 pineapple 8172
 sisal 7992
 photosynthesis, tea 8265
 respiration, tea 8265
 tannins, content, tea 8265
 MSMA
 injury
 oil palm 4067
 tropical crops 8134
 N-phenacetyl amino acids, seed, germination, inhibition 8637
 naptalam
 flower, sex, cucumber and gherkin 8647
 injury, squash 624
 translocation, growth substances, bean (*Phaseolus*) 5988
 nitralin
 application, water-soluble plastic sheet, vegetables 1140
 injury
 bedding plants 2171
 chrysanthemum 6144
 cucumber and gherkin 625, 5209
 prevention, vegetables 1140
 residues, application, methods, vegetables 1949
 tolerance, orange 8065
 nitrofen, injury, bean (*Phaseolus*) 8683
 noruron, -fertilizer mixtures 1682
 Oxadiazon, application, methods compared, grapevine 7561
 paraquat
 application, irrigation, vegetables 6905
 desiccation, sugar cane 4894
 enzyme activity, inhibition, sugar cane 8251
 fungus control
 Mycogone perniciosa, mushroom 8824
 Verticillium malthousei, mushroom 8824
 injury
 blueberry 8493
 oil palm 4067
 residues, vegetables 6905
 Patoran, leaf, chlorophyll, content, valerian 8045
 Paxilon, injury, application time, onion 6031
 pebulate, injury, tomato 6904
 pentanochlor, enzyme activity, tomato 6926
 phenmedipham, injury, spinach 7618
 phenoxy acids, -fertilizer mixtures 1682
 picloram
 persistence, essential oil plants, fruit trees and plants, vetiver 2495
 proteins, biosynthesis, bean (*Phaseolus*) 6855
 residues, plant, sugar cane 9241

Subject Index

Herbicides *contd.*

picloram *contd.*
toxicity, essential oil plants, fruit trees
and plants, vetiver 2495
translocation, sugar cane 9241
potassium azide, injury, tomato 6068
prometon, injury, pineapple 8172
prometryne
bulb, composition, onion 7747
injury
capsicum 667
carrot 7816
persistence, pineapple 8172
plant, composition, carrot 5376
residues
fruit, strawberry 2700
root, carrot 5376
pronamide
injury, lawns and sports turf 7922
tolerance, vegetables, ornamental plants
6779
propachlor
maturity, cauliflower and broccoli
1164
plant responses, bean (*Phaseolus*) 641
pyrazon
injury
carnation 2921
spinach 7618
residues, application, methods,
vegetables 1949
R-7465, tolerance, orange 8065
Ramrod, tolerance, brassicas 3662
RH 315
injury, carnation 2921
residues, application, methods,
vegetables 1949
Semeron, tolerance, brassicas 3662
semeron 25, plant, thinning, vegetables
7648
simazine
enzyme activity, tea 8265
fungus control, *Verticillium dahliae*,
mushroom 8824
injury
grapevine 3570, 5839
plum 4188
prevention, activated carbon,
strawberry 545
strawberry 8511
testing, bean (*Phaseolus*) 193
leaf
nitrogen, content, apple 968
sugars, content, apple 968
nitrogen, plant content, strawberry
545
persistence, soil, apple 2561
photosynthesis, tea 8265
potassium, plant content, strawberry
545
proteins, content, bean (*Phaseolus*)
5995
residues
fruit, strawberry 2700
soil 1683
apple 6543
annual report, Australia 6523
respiration, tea 8265
soil nutrient availability, apple 935
tannins, content, tea 8265
tolerance
black currant 5081, 6672
stone fruits 3510
translocation
black currant 5081
annual report, UK 3521
marrow, annual report, UK 5943
yield increase
black currant 6672
pear 8466
2,3,6-TBA, injury, lettuce 1967
terbacil
injury
banana 9129
grapevine 3570
peach 452
pecan 5056
sisal 7992
stone fruits 3510
sugar cane 9237
tolerance
stone fruits 3510
sugar cane 9239

Herbicides *contd.*

terbutryne
absorption, legumes 4468
injury
application methods, legumes 5888
bean (*Phaseolus*) 3700
proteins, content, bean (*Phaseolus*)
5995
tolerance, legumes 4468, 5888
testing
spray cabinet 8
tomato 252
Tordon 22K, injury, pea 2051
triazines
enzyme activity, pea 2070
injury, grapevine 6733
nutrients, content, vegetables 4485
proteins
content
bean (*Phaseolus*) 2012
pea 2070
annual report, Irish Republic
5150
vegetables 4485
tolerance 1650
trietazine, residues, fruit, strawberry
2700
trifluralin
injury
bedding plants 2171
container-grown plants 2986
pea 4501
tomato 8770
maturity, cauliflower and broccoli
1164
residues, application, methods,
vegetables 1949
responses, tomato 6066
yield increase, grapevine 1902
2,4,5-T, injury, lettuce 1967
unspecified, injury, fruit, annual report,
USA 24
various
application
equipment, oil palm 2457
mulches, ornamental plants 8853
injury
apple 7316
cucurbits 623
ornamental plants 5392
sugar cane 405
plant, composition, tomato 6067
residues, soil, vegetables, annual report,
UK 5154
responses, ornamental plants 8852
root
growth
apple 1739
container-grown plants 7847
tolerance
annual report, Austria 265
gooseberry, annual report, UK 529
lettuce, annual report, UK 5154
ornamental plants 2173, 2173
VCS-438, injury, onion 6029
Venzar, injury, strawberry, annual report,
German Federal Republic 8481
vernolate
residues
fruit
strawberry 1698
tomato 1698
Herbs
essential oil 8973
Italy 6244
products and by-products 8973
review 8973
value
aesthetic, book 4607
functional, book 4607
Hercinotrips bicinctus, banana pests 4835
Herpestis spp., plant, composition 769
Herpetogramma licarsialis, lawns and
sports turf, pests 5451
Hesperomyces virescens, fungal parasite on,
Chilocorus bipustulatus 1490
Heterodera rostochiensis
control, tomato pests 6089
host-pest relationships, tomato pests
4581
population studies, nematicides, tomato
pests 7800

Heterodera rostochiensis *contd.*

population suppression, by compositae
283
resistance, rootstocks, tomato pests 2121
tomato pests 5352, 6088
annual report, UK 5885
H. schachtii
beetroot pests 1149
brussels sprouts pests 5194
cabbage pests 1149
annual report, USA 8585
population studies, cabbage pests 5927
soil fumigation, cabbage pests 5927
H. trifolii
beetroot pests 3317
cabbage pests 3317
Heteropappus spp., flavonoids, content
1431
Heteropeza pygmaea, mushroom pests
2150
Hibiscus
annual report, Netherlands 4604
breeding and selection, annual report,
Belgium 8835
growth substances, dwarfing, chlormequat
1384
Hibiscus spp.
annual report, USA 1441, 6129, 8834
diseases, *Microxyphiella hibiscifolia*, on
plant secretion 4721
ethylene, production, flower abscission
layer 7049
flower
abscission layer
ethylene production 7049
growth substances, endogenous 7049
flowering, date, growth substances 7052
growth substances
endogenous, flower abscission layer
7049
flowering
ancymidol 7052
chlormequat 7052
ethephon 7052
retardants
ancymidol 7052
chlormequat 6212, 7052
review 7846
pigments 2306
propagation, cuttings 2167
taxonomy, cytotoxicity 4720
varieties, annual report, Netherlands
6127
H. syriacus, varieties 321
High density planting, apple, annual report,
UK 903
High density planting
apple 464, 925, 1729, 1737, 2548, 3390,
3401, 7348
annual report
Irish Republic 1720
UK 3371
for juice production 1738
cherry 995
citrus, report, Sri Lanka 6323
coffee 7195
economics, apple 463, 7331
fruit transport, pallets 3362
fruit trees and plants 904
annual report, Italy 6507
lemon 3104
light, interception, fruit trees and plants
1710
light intensity, mandarin and tangerine
8064
light interception
apple 7354
fruit trees and plants 2558
mechanical, apple 1726
olive 2421, 4025
pear 3489
pome fruits, annual report, Australia 450
rootstocks, apple 8344
Switzerland
statistics
apple 8324
apricot 8324
cherry 8324
damson 8324
peach 8324
pear 8324
plum 8324
tree fruits, annual report, Australia 8313

High density planting *contd.*

varieties, apple 8344

Himacerus apterus, biological control of,
Aceria myopaeformis 3409**Hippeastrum**, forcing 6165**Hippeastrum diseases**

annual report, Netherlands 2219

mosaic virus, indicator plants 1368

Hippophae spp.

flower, flavonoids 6238

fruit

ascorbic acid 6238

carotene 6238

flavonoids 6238

vitamin B 6238

vitamin E 6238

fungicides

plant

height, TMTD 7957

size, TMTD 7957

glycosides 7053

leaf, flavonoids 6238

nutrition 7957

seed

germination, ripeness 5481

production, harvesting, time of 5481

treatment

fungicides, TMTD 7957

nutrients 5482

Holarrhena febrifuga, alkaloids 8026**Holly**breeding and selection, annual report,
Canada 8836

cold

protection, plastic films 7037

resistance, testing 3912

flowering

photoperiodism 6215

secondary, photoperiodism 6215

growing

in containers 3912, 6214

weed control 4614

media, bark, manganese toxicity 4691,
6216

under plastic 7037

herbicides

injury

dichlobenil 2986, 4614

EPTC 2986

trifluralin 2986

organic acids, content, seasonal variations
3926

photoperiodism

flowering 6215

growth 6215

pots, types compared 6214

tissue culture, embryo 4692

weed control 2986, 4614

weeds, competition, container-grown
plants 4693

wind, protection, plastic films 7037

winter hardiness

containers, types compared 6214

nitrogen nutrition 2311

Holly fruit, pigments, taxonomic studies
7038**Holly leaf**

composition

nitrogen 3912

potassium 3912

Holly nutrition

manganese, toxicity 4691, 6216

nitrogen 2311

container-grown plants 267

sources 3912

winter hardiness 2311

potassium 2311, 3912

Holly soil

salinity

chlorine 2161

plant, tolerance 2161

sodium 2161

temperature

containers 6214

mulching 6214

Holly varieties, Netherlands 4690**Hollyhock**, tissue culture, light 726**Hollyhock diseases**, *Bacterium tumefaciens*,
tissue culture 726**Homona coffearia**, tea pests, annual report,
Sri Lanka 8262**Hop**

annual report

Belgium 6272

German Federal Republic 7063-7064,
7087

UK 3040, 3954, 9009

USA 324

breeding and selection

Czechoslovakia 6273

triploids 3042

clones, Czechoslovakia 7993

cover crops, grass 3041

drying 1420, 3048

fungicides 3958

absorption, streptomycin 1419

residues, streptomycin 1419

translocation, streptomycin 1419

growing, Czechoslovakia 7993

harvesting

mechanical

equipment, types compared 5513

labour management 3960

herbicides 3321, 3958

insecticides 3958

pest resistance 3046

residues, tamaron 4143

irrigation 3044

economics 3044

recommendations, Czechoslovakia 343

requirements, determination 3043

molluscicides 3958

monoecious, tetraploid plant 4749

organic acids 6783

determination 7995-7996

photosynthates, translocation 3959

photosynthesis 3959

planting

root restriction 7089

time 5505-5506

processing, drying 9011

products and by-products, granulated

leaves, animal fodder 6281

pruning and training 4750

methods compared 3041

stringing, materials 5507

wirework construction 5508

research

annual report, German Federal

Republic 340

Belgium 4748

Czechoslovakia, review 7088

resins, determination 7997

spraying

equipment 3045

methods compared 5512

stomata, movements, disease infection,
Pseudoperonospora humuli 5510

storage

lupulins, metabolism 7998

sulphur dioxide, application 1421

sulphur 6280

Hop cone

composition

bitter acids 6273-6274

resins 6273-6274

essential oil, content, varietal differences

7994

iso α -acids, content, seeded and seedless

compared 3047

lupulins, metabolism, varietal differences

7998

morphology 6273-6274

organic acids

content, seeded and seedless compared

3955

varietal differences 3956

photosynthesis 3959

Hop diseases

annual report, German Federal Republic

7087

arabis mosaic, vectors 3041

Fusarium oxysporum, control 7091*F. spp.*, control 6279

German Democratic Republic 1691

Pseudoperonospora humuli 1419, 3045,
4748

forecasting 345, 6277

incidence 6277

infection process, stomatal opening

5510

Sphaerotheca humuli 4748

control 6278

Hop diseases *contd.**Verticillium albo-atrum*

control 7091

cultural methods 3325

incidence 7092

resistance, enzyme activity 8691

varietal resistance 3956

V. dahliae, incidence 7092*V. spp.*, control 6279**Hop disorders**, crinkle, zinc deficiency
6276**Hop growth substances**, cuttings, treatment,
IAA 5504**Hop leaf**, removal, chemical 3958**Hop nutrition** 3041

boron, deficiency 6499

FYM 5509, 6275

general, organic and inorganic compared

9010

organic fertilizers 7090, 9010

phosphorus 5509

zinc 6276

Hop pests

aphids, control, annual report, German

Federal Republic 7964

deer, repellants, varietal preference 7095

German Democratic Republic 1691

hares, repellants, varietal preference 7095

Phorodon humuli 3041, 4748

annual report, UK 2330

control 5511-5512, 7094

insecticide resistance 3046

Tetranychus telarius, integrated control

7093

Xiphinema diversicaudatum, virus,

vectors, arabic mosaic 3041

Hop plant

composition

copper 344

manganese 344

zinc 344

Hop propagation

cuttings

growth substances, IAA 5504

soilless culture 5504

Hop soil, cultivation, methods compared

3041

Hop varieties

annual report, Irish Republic 3957

comparative trials, Czechoslovakia 341

cone

essential oil, content 7994

organic acids 3956

disease resistance, *Verticillium albo-atrum*

3956

German Federal Republic 342

lupulins, metabolism 7998

Hoplocampa testudinea

apple pests, annual report, UK 8318

varietal resistance, apple pests 8380

Hoplolaimus spp., sugar cane pests 7246**Horse-radish nutrition**

nitrogen 3936

sources, compared 8972

phosphorus 3936

potassium 3936

Horse-radish root

anatomy 5917

carbohydrate storage 5917

volatile constituents 757

Horticultural

economics, Scotland 12

engineering, book 2497

legislation, EEC 5692

production, Europe, book 6473-6474

research institutes, directory 7278

science, book 1670

Horticultural crops

appearance, improvement techniques

7308

common names, multilingual glossary

7030

diseases

general

book 6497

resistance 4137

economics

Netherlands 5672

symposium 2486

growing, under plastic, annual report,

Irish Republic 6482

irradiation, uses, review 4124

marketing, symposium 2486

- Horticultural crops** *contd.*
 phytoalexins, review 4137
 pollination, insects, review 7282
 production and trade, symposium 2486
 quality, improvement techniques 7308
 review, FAO 3297
 statistics 2485
 survey, UK 4123
- Hosta** spp.
 propagation, rhizome 4613
 tulipoides 8908
- Hoya** spp., diseases, *Glomerella cingulata* 2307
- Humates**
 media constituent
 nutrient solutions, tomato 8774
 soil, tomato 8774
- Humic acid**
 ascorbic acid
 content
 cucumber and gherkin 684
 tomato 684
 enzyme activity
 cucumber and gherkin 684
 tomato 684
 growth substances
 endogenous
 cucumber and gherkin 684
 tomato 684
 pectins, content, tomato 6072
 phosphates
 metabolism
 cucumber and gherkin 684
 tomato 684
 respiration
 cucumber and gherkin 684
 tomato 684
- Humidity, relative**
 boron, absorption, sugar cane 4102
 celery 8815
 control, light, vegetables, annual report, Netherlands 8581
 disease incidence
 azalea 6225
Colletotrichum spp., coffee 5620
Leveillula taurica, tomato 8781
Peronospora destructor, onion 3763
Verticillium dahliae, cacao 7182
 flowering, sugar cane 8250
 growth studies
 nitrogen nutrition, apple 7351
 soil moisture, apple 7351
 leaf, composition, apple 2586
 nitrogen nutrition, apple 2586
 varietal behaviour, sugar cane 8250
 water relations
 culture solution osmotic potential, mustard 8985
 sugar cane 4102
- Hungary**
 capsicum, growing 4530
 cherry, economics 6614
 hazel varieties, comparative studies 6621
 peach
 growing, review 6622
 production and trade 6622
 squash, growing 7672
 stone fruits, growing 4946
 tomato, growing, for processing 7778
- Huntleya** spp.
 flower, bud initiation, temperature 2273
 nutrition 2273
 temperature, flower bud, initiation 2273
- Hurricane**, damage, disease incidence, persimmon 4827
- Hyacinth**
 air pollution, sulphur dioxide, ethylene, injury 6132
 annual report, Netherlands 2219
 breeding and selection, seed, production 7008
 forcing 6165
 herbicides, injury, chlorpropham 2947
- Hyacinth bulb**
 heat treatment, bacteria control 2242, 4656
 storage, temperature 2242, 4656
- Hyacinth diseases**
 aster yellows 7007
 "Lisser" syndrome, indicator plants 290
Xanthomonas hyacinthi, bulb treatment, heat 2242, 4656
- Hyacinth disorders**, hollow nose, herbicide injury 2947
- Hyacinth pests**, *Macrosteles sexnotatus*, mycoplasma, vectors 290
- Hyacinth seed**
 germination 7008
 production 7008
- Hyaloides** spp., predator on, *Panonychus ulmi*, apple 4213
- Hyalopectus arundis**, control, peach pests 7448
- Hybrids**
 interspecific 2902
 cacao, annual report, Ghana 7177
 citrus 5545
 peach × plum 4244
 tea 6456
 seed, production, coconut 5615
- Hydrangea**
 flowering
 light
 artificial 8841
 supplementary 8841
 supplementary 8841
 growing
 in greenhouses, glass, plastic 8841
 peat, nutrition, nitrogen 8941
 heat treatment, virus control 7054
 light
 artificial
 equipment 8841
 flowering 8841
 supplementary
 equipment 8841
 flowering 8841
 pigments, biosynthesis, tissue culture 7055
 pollination 1396
 tissue culture, leaf, pigments, biosynthesis 7055
- Hydrangea diseases**
 mycoplasma 5410
 control, antibiotics 5410
 ring mosaic 4722
 ringspot 7054, 8962
- Hydrangea flower**
 bud initiation 2996
 pigments, annual report, Belgium 5386
- Hydrangea growth substances**
 injury, chlormequat 8842
 responses
 aminozide 8842
 chlormequat 8842
- Hydrangea pests**, *Ditylenchus dipsaci*, annual report, UK 6128
- Hydrangea propagation**
 budding, chip budding 1396
 cuttings 1396
- Hydrangea varieties**
 Harmony 1396
 Roanoke 1396
- Hydrastis canadensis**, alkaloids 8027
- Hydroecia micacea**, hop pests, annual report, German Federal Republic 340, 7064, 7087
- Hylemya antiqua**
 control, onion pests 8742
 leek pests 662
 onion pests 1255
 annual report
 German Federal Republic 7599
 Netherlands 6772
- H. brassicae**
 brassica pests 1173
 brassicas, pests, annual report, German Federal Republic 8579
 cabbage pests 1174
 annual report, UK 1934, 3610
 chemosterilization, cauliflower and broccoli pests 8625
 traps, bait, cauliflower and broccoli pests 8625
- H. cilicrura**
 bean (*Phaseolus*) pests 5252
 seed treatment, bean (*Phaseolus*) pests 8692
 soil treatment, bean (*Phaseolus*) pests 8692
- H. platura**, control, cucumber and gherkin pests 5928
- H. spp.**
 brassicas, pests, annual report, UK 4366
 cauliflower and broccoli pests 1162
- Hylemya** spp. *contd.*
 cauliflower and broccoli pests *contd.*
 annual report
 Canada 5883
 UK 5154
 seed treatment, radish pests 4438
 swede pests, annual report, Canada 5883
 vegetables, pests, annual report, Canada 1944, 2734
- Hyllocereus** spp., edible fruits 822
- Hylomecon vernalis**, alkaloids, content 1429
- Hymenobosmina** spp., parasite of, *Batrachedra amydraula*, date 1514
- Hymenocyclus** spp.
 ground cover plants 710
 weed control 710
- Hyoscyamus desertorum**
 alkaloids 6301
 flower
 anatomy 6302
 histology 6302
- H. niger**, virus indicator plants 1368
- H. spp.**
 flower
 anatomy 6302
 histology 6302
- Hypericum** spp.
 herbicides, injury 1323
 phenolic compounds 5525
- Hyperodes humilis**, cabbage pests, annual report, USA 4367
- Hyperomyzus lactucae**
 black currant pests 5802
 small fruits, pests 5079
 vectors, necrotic yellows, lettuce pests 7631
- Hyphaene thebaica**
 alkaloids, content, fruit 6470
 fruit, composition 6470
 glycosides, content, fruit 6470
 medicinal properties 6470
 pollen, composition 8280
 seed, composition 8280
 sugars, content, fruit 6470
- Hypercyrta** spp., growing, in pots, annual report, Netherlands 6127
- Hypopholis sommeri**, sugar cane pests, annual report, South Africa 7230
- Hypothenemus hampei**, population studies, host orientation, coffee pests 9170
- Hyptis emoryi**, plant, composition 8028
- Hyssop**
 ascorbic acid, content, leaf 4728
 carotene, content, leaf 4728
- Ilex** spp.
 containers
 depth 8943
 types compared, soil temperature 7036
 growing
 in containers
 irrigation 8943
 soil moisture 8943
 weed control 8853
 peat, nutrition, nitrogen 8941
 herbicides
 application, mulches 8853
 injury, dichlobenil 8853
 propagation, cuttings, media 3838
 taxonomy, chemotaxonomy 7038
 tissue culture, polyembryony induction 3911
- Illicium** spp., essential oil, composition, determination 7066
- I. verum**, bibliography 7967
- Illustrations, coloured**
 deficiency symptoms, ginger 5492
 diseases
 fruit trees and plants 1689
 India 860
 virus
 apple 2575
 pear 2575
 disorders, fruit trees and plants 1689
 varieties
 apple 1724
 apricot 1724
 cherry 1724
 nectarine 505, 4246-4247
 papaw 1606
 pear 1724

Impatiens

- enzyme activity
- growth substances 7884
- leaf, petiole glands 4642
- photoperiodism 7884
- flowering, enzyme activity 7884
- ozone, injury 1322
- photoperiodism
 - enzyme activity 7884
 - interaction, growth substances 7883
- sulphur dioxide, injury 1322

Impatiens flower, pigments, tissue culture 284**Impatiens growth substances**

- enzyme activity, plant, GA 7884
- interaction
 - photoperiodism
 - cycloheximide 7883
 - GA 7883

Impatiens varieties

- bedding plants 2214
- pot plants 2214

Imperata cylindrica

- as weeds
- coconut 9147
- control by, *Gliricidia maculata*, rubber 8179

I. spp.

- as weeds 841
- oil palm 1600
- rubber 7224, 9209
- tea 4106

Incense plants, *Jurinea macrocephala* 6322**India**

- apple, growing, high altitudes 7311
- apricot, growing, high altitudes 7311
- Bursera delpechiana*, growing 8994
- cardamoms, growing 7068
- coconut, economics 9150
- coffee, growing 8145
- crops, diseases 860
- date, growing 6371
- guava, economics 5624
- jasmine, growing 8840
- medicinal plants, survey 5515
- mint, growing 5500
- onion, growing, in the rainy season 6874
- ornamental plants, growing 8840
- peach, growing, high altitudes 7311
- pear, growing, high altitudes 7311
- plum, growing, high altitudes 7311
- rose, growing 8840
- tea, growing 7265
- walnut, growing, high altitudes 7311
- Ziziphus* spp., growing 5665

Indium, toxicity, cucumber and gherkin 157**Indonesia**

- coconut, growing 9147
- mushroom, growing 6121

Inga edulis*, as shade plants, coffee** 9162Inopus* spp., sugar cane pests, annual report, Australia** 9219**Insecticidal plants**

- Annona squamosa* 1534
- Melia azedarach* 4751
- Milletia* spp. 4752

Insecticides

- acephate 4932
- aldicarb, residues, tomato 1292
- aldrin
 - absorption
 - eggplant 4546
 - turnip 2762
 - metabolism
 - bean (*Phaseolus*) 2033
 - bean (*Vicia*) 2033
 - pea 2033
 - residues
 - plant, eggplant 4546
 - soil
 - cauliflower and broccoli 4431
 - sugar cane 5653
 - translocation, turnip 2762
- arprocarb resistance, *Aeneolamia varia saccharina*, sugar cane 8235
- arsenic
 - residues
 - fruit 3329
 - soil, annual report, USA 24
 - tea 3329
 - vegetables 3329

Insecticides contd.

- azinthos-methyl, fungus control, *Mycosphaerella ligulicola*, chrysanthemum 6973
- BHC
 - injury, application methods, sugar cane 8236
 - interaction, nitrogen nutrition, sugar cane 7251
 - residues
 - leaf, tea 4900
 - soil, tea 4900
- binapacryl, residues, tea 4898
- bromophos
 - injury, bean (*Phaseolus*) 8692
 - residues, determination, cherry 4238
- carbarnates
 - injury, vegetables 2742
 - pest resistance
 - Aeneolamia varia saccharina*, sugar cane 9254
 - Phorodon humuli*, hop 3046
- carbaryl
 - Aeneolamia varia saccharina*, sugar cane 8235
 - fruit
 - russetting, apple 1784
 - size, apple 3423
 - thinning
 - apple 974, 1784, 3422-3423, 8405-8406
 - annual report, Netherlands 5697
 - injury, tomato 1288
- carbofuran, residues, plant, cabbage 8627
- CELA K 673 5685
- CELA S 2957 5685
- chlorfenvinphos
 - injury, poinsettia 8945
 - persistence, carrot 6942
 - residues 1173
- chlorypyrifos
 - application
 - as emulsifiable concentrates, vegetables 2506
 - as granules, vegetables 2506
 - residues
 - determination
 - fruit 4142
 - vegetables 4142
 - plant, lettuce 2506
- Cygon, injury, tomato 4576
- Dasanit, persistence, soil 1255
- DDD
 - residues
 - fruit
 - apple 5740
 - pear 5740
- DDE
 - residues
 - fruit
 - apple 5740
 - pear 5740
 - plant, bean (*Phaseolus*) 646
 - soil
 - bean (*Phaseolus*) 646
 - cauliflower and broccoli 4431
- DDT
 - absorption
 - eggplant 4546
 - from soil, mint 7988
 - mite populations, apple 5737
 - persistence, radish 619
 - residues
 - fruit
 - apple 5740
 - pear 5740
 - tomato 8787
 - leaf, tea 4900
 - plant
 - bean (*Phaseolus*) 646
 - eggplant 4546
 - soil
 - bean (*Phaseolus*) 646
 - cauliflower and broccoli 4431
 - plant absorption, mint 7988
 - tea 4900
 - root, nodule formation, bean (*Vicia*) 201
- demephion, residues, cap, mushroom 8826
- demeton, injury, chrysanthemum 6976

Insecticides contd.

- demeton-methyl
 - plant metabolism, mandarin and tangerine 3138
 - residues, fruit, mandarin and tangerine 3138
- diazinon
 - injury
 - papaw, report, USA 6382
 - vegetables 2123
 - persistence, soil 1255
- dichlorvos
 - injury
 - application method, chrysanthemum 4629
 - cherry 2625
 - residues, cap, mushroom 8826
- dicolof
 - persistence, peach, annual report, Canada 2515
 - plant metabolism, mandarin and tangerine 3138
 - residues
 - fruit, mandarin and tangerine 3138
 - tea 4898
- dieldrin
 - absorption
 - eggplant 4546
 - turnip 2762
 - injury, vegetables 2123
 - residues
 - fruit, tomato 8787
 - plant
 - bean (*Phaseolus*) 646
 - eggplant 4546
 - soil
 - bean (*Phaseolus*) 646
 - cauliflower and broccoli 4431
 - sugar cane 5653
 - translocation, turnip 2762
- dimefox, pest resistance, *Phorodon humuli*, hop 3046
- dimethoate
 - flower bud, development, apple 6572
 - fruit
 - ripening, *Ficus sycomorus* 1811
 - russetting
 - apple 1769
 - prevention, apple 8383
 - growth, increase 48
 - injury, tung 8117
 - plant composition, mandarin and tangerine 3138
 - plant metabolism, mandarin and tangerine 3138
 - residues
 - cap, mushroom 8826
 - caraway 326
 - determination, tomato 7777
 - fennel 326
 - fruit
 - banana, annual report, Australia 5600
 - mandarin and tangerine 3138
 - plant, grapevine 5863
 - root, radish 4438
- dimethyl phosphoroamidothioate, residues, fruit, tomato 8788
- dinocap, residues, tea 4898
- dioxathion 1744
- disulfoton
 - application, dusts, bean (*Vicia*) 4490
 - injury, application methods, bean (*Vicia*) 4490
- Disyston, persistence, soil, radish 1180
- DNOC
 - fruit
 - thinning
 - annual report, Australia 450
 - peach 4263
 - DS-15647, injury, tomato 4576
 - Dyfonate, persistence, soil 1255
 - efirsulphonate
 - plant metabolism, mandarin and tangerine 3138
 - residues, fruit, mandarin and tangerine 3138
 - endosulfan
 - residues
 - fruit, boysenberry 5812
 - vegetables 2124
 - endrin
 - absorption, eggplant 4546

Insecticides contd.endrin *contd.*

residues

plant

bean (*Phaseolus*) 646

eggplant 4546

soil, bean (*Phaseolus*) 646

fenitrothion, carbon dioxide fixation,

darkness, bean (*Vicia*) 8710

fensulfothion, residues 1173

formothion

plant composition, mandarin and

tangerine 3138

plant metabolism, mandarin and

tangerine 3138

residues, fruit, mandarin and tangerine

3138

-fungicide mixtures

application, reduced concentration,

apple 2585

cucumber and gherkin 6820

fruit

ascorbic acid, content, apple 2585

russeting, apple 1769

sugars, content, apple 2585

responses, garlic 6023

Furadan, injury, tomato 4576

heptachlor

absorption, eggplant 4546

residues, plant, eggplant 4546

root, nodule formation, bean (*Vicia*)

201

heptachlor epoxide

absorption, eggplant 4546

residues, plant, eggplant 4546

hexachlorobutadiene, persistence,

grapevine 2724

iodofenphos, residues, determination,

cherry 4238

isobenzan, yield increase, sugar cane

7250

Kelthane, leaf, sugars, content, apple

3418

lead arsenate, residues, plant, vegetables

1951

lindane

absorption

pea 6863

from soil, mint 7988

residues

fruit

apple 5740

pear 5740

soil

cauliflower and broccoli 4431

plant absorption, mint 7988

root, nodule formation, bean (*Vicia*)

201

translocation, pea 6863

malathion

residues

bean (*Phaseolus*) 183

fruit, date 8107

menazon, persistence, pea 4504

methidathion

injury

tomato 3808

vegetables 2123

methomyl

residues

essential oil, mint 8997

fruit 2507

plant

cabbage, chinese 2507

tea 2507

methyl-parathion

residues

plant

fennel 2320

mint 2320

mevinphos, as mutagen, tradescantia

1346

monocrotophos

injury, chrysanthemum 6976

residues

determination 7302

leaf

apple 615

cabbage 615

N-2596, residues 1173

naled

fruit, set, tomato 2122

injury, tomato 2122

Insecticides contd.

nicotine, injury, application method,

chrysanthemum 4629

oil

emulsifiers, fruit dips, orange 1493

fruit, colour, orange 5564

injury

apple 4989

chinese gooseberry 5080

tolerance, apple 3411

organo-tin, synergism, fungicides, annual

report, India 1657

organophosphorus

residues

determination, vegetables, cherry

3330

plant, vegetables, cherry 3330

parathion

compatibility, tomato 1288

residues, determination 7303

Perthane

residues

fruit, pear 2500

plant, spinach 2500

phorate

application, dusts, bean (*Vicia*) 4490

residues, essential oil, mint 8997

root, nodule formation, bean (*Vicia*)

201

phosalone

carbon dioxide fixation, darkness, bean

(*Vicia*) 8710

residues, fruit, strawberry 8517

phosvel, injury, watermelon 6824

Plictran, injury, rose 4712

Sevin, leaf, sugars, content, apple 3418

Tamaron, residues 4143

Telodrin, interaction, nitrogen nutrition,

sugar cane 7251

Temik, persistence, tomato 4577

tetrachlorvinphos, injury, apple 4289

tetradifon

plant composition, mandarin and

tangerine 3138

plant metabolism, mandarin and

tangerine 3138

residues, fruit, mandarin and tangerine

3138

thiometon, pest resistance, *Phorodon**humuli*, hop 3046

tolerance, annual report, Austria 265

toxaphene

residues

plant, bean (*Phaseolus*) 646soil, bean (*Phaseolus*) 646

trichloronate

injury, bean (*Phaseolus*) 8692

residues

root, radish 4438

vegetables 1173

trichlorphon

growth, increase 48

residues, determination, tomato 7777

vamidothion, residues, spinach 4393

various

application

economics, fruit trees and plants

4153

equipment 4933

as granules, placement, carrot 5374

residues

carrot, annual report, UK 1934

determination, sugar cane 7249

fruit, fruit trees and plants 3328

plant

fruit trees and plants 4141

vegetables 3328, 4141

removal, vegetables 1699

tolerance, ornamental plants 2173

Integrated control*Adoxophyes orana*, apple, annual report,

Netherlands 5698

annual report

Canada 2515, 5695

USA 24

aphids, apple 2579

apple pests 478

annual report, German Federal

Republic 6506

cucumber and gherkin pests 5217

annual report, UK 6774

Cydia molesta, peach pests 514*C. pomonella*, apple 5739**Integrated control contd.***Dysaphis plantaginea*, apple, annual

report, Netherlands 5698

grapevine pests 4350

mealybugs, citrus 9096

Operophtera brumata, apple, annual

report, Netherlands 5698

Panonychus ulmi

apple 8394

apple pests 1756

peach pests 514

Phylloxera vitifoliae, grapevine pests

1921

Rhabdoscelus obscurus, sugar cane 4099

scales, citrus 9096

strawberry pests 2703

Tetranychus telarius

hop 7093

rose 4711

vegetables 7802

Thomasiana theobaldi, raspberry 2688*Trialeurodes vaporarum*, vegetables

7802

vegetables, pests 3627

Interstocks

for Beurré Bosc, pear 5784

comparative trials, apple 6532, 6535

Malling rootstocks, apple 930

root composition, apple 1727

root systems, apple 6535

tree size, apple 3387

Inula grandis, growing, USSR 7111*I. spp.*

composition 7110

essential oil 7110

Iodine

content, fruit, feijoa 7163

fruit

composition, black currant 8486

size, black currant 8486

sugars, content, grapevine 8553

iron absorption, grapevine 8553

shoot, sugars, content, grapevine 8553

Ipomoea spp., electrical activity 3847*I. spp.*

fatty acids, metabolism 8591

flower

bud initiation

chromatin, activity 3849

nucleic acids, biosynthesis 3849

growing, vegetable crop 6119

growth substances

dwarfing

AMO-1618 6151

chlormequat 6151

juvenility

AMO-1618 6151

chlormequat 6151

GA 6151

juvenility, growth substances 6151

leaf

composition

protein 6119

vitamins 6119

nucleic acids, biosynthesis, flower bud,

initiation 3849

propagation, cuttings, treatment, growth

substances 2930

taxonomy, key 3846

tissue culture, cell suspension, fatty acids,

metabolism 8591

as weeds, sugar cane 9236

Iridaceae, ornamental species, Denmark

3863

Iridomyrmex humilis, predator on, *Aphytis**melanis*, citrus 1492**Iris**

annual report, USA 1315

annual report

Netherlands 2219

UK 3834, 3874

flavones 2246, 6178

flowering

bulb treatment 5424

date

bulb lifting time 8895

bulb storage temperature 8895

forcing 1359, 6165

media compared, annual report, UK

8838

growing

long-term 2243

under plastic, annual report, UK 4606

Iris contd.

- planting, time, annual report, USA 2152
- respiration, bulb, ethylene, treatment 2245
- sterols, content 6177
- temperature, flower bud initiation 297
- Iris bulb, drying 1359

Iris bulb

- drying 8895
- production 287
- annual report
 - Italy 6960
 - UK 2153
- treatment, temperature, flowering 5424

Iris diseases 2243

- Penicillium* spp., annual report, USA 6129
- Sclerotium wakkeri* 3317

Iris flower

- bud initiation
- ethylene 8895
- temperature 297
- cut, production 287

Iris growth substances

- endogenous, leaf, translocation 706
- rhizome bud, number, MH 5426

Iris nutrition

- phosphorus, residues from straw burning 2243
- potassium, residues from straw burning 2243

Iris propagation

- axillary buds, tissue culture 5425
- rhizome 4613
- treatment, growth substances 5426

Iris seed

- composition 2943
- oil 2943
- sugars, content 8883

Iris soil

- amendments
 - compared 4657
 - perlite 4657
 - sand 4657
 - sawdust 4657

Iris varieties 2244

- Irish Republic, apple, economics 8336

Iron

- absorption
 - fertilizers compared, spinach 5903
 - iodine nutrition, grapevine 8553
- leaf
 - antirrhinum 3854
 - sources, orange 3997
 - surfactants, tomato 4562
- nutrient solution
 - bicarbonate content
 - bean (*Phaseolus*) 4507
 - pea 4507
 - composition
 - bean (*Phaseolus*) 4507
 - pea 4507
- pH
 - bean (*Phaseolus*) 4507
 - pea 4507
- orange 3997, 6342-6343
- soil salinity
 - squash 6912
 - tomato 6912
- zinc sources, orange 3121
- amino acids, content, carrot, tissue culture 1307
- application
 - foliar
 - orange 3997
 - surfactants, cabbage 1136
 - methods compared, grapevine 7569
- availability
 - nitrogen nutrition
 - chrysanthemum 8589
 - vegetables 8589
- chlorosis
 - apple 6563
 - cherry 8429
 - fruit trees and plants, 7319
 - grapevine 7569
 - orange 8075
 - phosphorus nutrition, macadamia 6374
 - rose 6268
- content
 - copper nutrition, coffee 393
 - flower, peach 6631

Iron contd.

- content contd.
- fruit
 - flower, peach 6631
 - peach 6631
- irradiation resistance, pea 1241
- leaf
 - nitrogen nutrition, sources, peach 3470
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
- nitrogen nutrition, tea 6457
- shoot
 - root temperature, chrysanthemum 8863
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
 - zinc nutrition, grapevine 1912
- deficiency 3299
- annual report, UK, pear 3347
- citrus nutrition 1480
- coffee 9166
- cucumber and gherkin 7683
- diagnosis, enzyme activity, vegetables 1145
- symptoms
 - cauliflower and broccoli nutrition 1983
 - ginger 5492
 - pineapple 9200
 - tomato 7789
- determination
 - ascorbimetry, vegetables 605
 - ferrozine, spinach 3303
- disease resistance, lemon nutrition 364
- disorder incidence
 - chlorosis, peach 8457
 - fruit trees and plants, nutrition 4947
- fruit
 - composition
 - grapevine 3580
 - orange 8075
- leaf
 - absorption, surfactants, cabbage 1136
 - chlorophyll, content, orange 8075
- composition
 - apple 4977
 - tomato 7789
 - potassium content, orange 9087
- leaf analysis
 - citrus 1484
 - cucumber and gherkin 7683
 - standards, fruit trees and plants 2496
 - sugar cane 412
- manganese content, peach 8457
- manganese imbalance, apple 4203
- nitrogen content, peach 8457
- nucleic acids, metabolism, carrot, tissue culture 1307
- phosphorus content, peach 8457
- plant analysis, sugar cane 6437
- potassium content, peach 8457
- proteins, content, carrot, tissue culture 1307
- sources
 - chelates
 - antirrhinum 3854
 - orange 3119
 - chrysanthemum 8589
 - compared, citrus nutrition 1480
 - manganese, deficiency, calcareous soils, citrus, nutrition 1480
 - soilless culture, vegetables 2845
 - vegetables 8589
- toxicity
 - cucumber and gherkin 7683
 - nitrogen nutrition
 - chrysanthemum 8589
 - vegetables 8589
- translocation
 - antirrhinum 3854
 - nutrient solution
 - composition
 - bean (*Phaseolus*) 4507
 - pea 4507
 - pH, pea 4507
 - orange 3997
 - zinc content, peach 8457
 - zinc imbalance, mangosteen nutrition 1667
- Irradiation**
 - fast neutrons
 - mutation induction, saintpaulia 1352

Irradiation contd.

- fast neutrons contd.
- seed, flower sex, cucumber and gherkin 5949
- gamma rays
 - amino acids, biosynthesis, kohlrabi 5931
- bulbs
 - post-harvest
 - onion 4527
 - storage life
 - composition, onion 1256
 - onion 3771
 - cap, post-harvest, mushroom 7841
 - cuttings, chrysanthemum 6970
- disease control
 - apple 982
 - grapevine, annual report, India 2668
 - vanilla, annual report, France 754
- essential oil, content, rose 5471
- fruit
 - carbohydrates, metabolism, banana 6390
 - flavour, apple, annual report, Canada 1719
 - mechanical injury resistance, citrus 9103
 - pigments, tomato 5365
 - post-harvest 1504
 - apple 984
 - avocado 1462
 - mango 1596
 - pear 1034
 - storage life
 - apple 2601, 7410-7411
 - banana 4043
 - tropical fruits 2435
 - ripening, tomato 4580
- injury
 - apple 3415-3416
 - black currant 3416
 - mango 8163
 - reduction, algal extracts, tomato 6097
- insect sterilization, *Acanthoscelides obtectus*, bean (*Phaseolus*) pests 2024
- mint 8998
- mutation induction 8295
- apple 5699
 - annual report, UK 903
 - fruit russetting 963
- begonia 7001
- bulbs, annual report, Netherlands 2219
- gladiolus 6172
- grapevine 7545
 - annual report, India 2668
- mint 6260
- ornamental plants, annual report, Belgium 5386
- rhododendron, annual report, Belgium 8835
- rose 5471
- turnip 8613
- vanilla, annual report, France 754
- vegetables, annual report, India 3607
- plant, height, tomato 4580
- Pods, post-harvest, storage life, pea 2074
- pollen viability, apple 3415
- post-harvest, ginger 4527
- seed
 - Clematis* spp. 753
 - flower sex, cucumber and gherkin 5949
 - germination, apple 6531
 - lettuce 1965
 - plant respiration, bean (*Phaseolus*) 3711
 - root formation on cuttings, bean (*Phaseolus*) 3711
 - treatment
 - cabbage 5921
 - tomato 245-246
- ionizing
 - disease control 604
- fruit
 - flavour, lemon 2411
 - post-harvest
 - cherry 7434

Irradiation *contd.*ionizing *contd.*fruit *contd.*post-harvest *contd.*

storage life

lemon 2411

mango 1595

papaw 2461

ripening 604

injury

carnation flower 604

review 892

snowdrop 737

tainting, citrus 604

vegetables 604

mutation induction 874

apple, fruit russetting 962

snowdrop 737

neutrons, mutation induction, *tradescantia* 5418

protons, seed treatment, lettuce 1965

resistance, plant composition, pea 1241

uses, review, horticultural crops 4124

X-rays

fruit

colour, tomato 8797

ripening, tomato 8797

mutation induction

Kalanchoe spp. 3903

rhododendron, annual report,

Belgium 8835

saintpaulia 1352

Streptocarpus spp., annual report,

UK 3832

tradescantia 5418

seed

flowering, *Catharanthus roseus* 8010pollen sterility, *Catharanthus roseus*

8010

seed number per fruit, *Catharanthus**roseus* 8010

treatment, bean 191

Irrigationalkaloids, content, *Solanum dulcamara*

8040

amino acids, content, *Solanum dulcamara*

8040

automatic 3309

equipment 3307

greenhouse 4135

grapevine 4344

pot plants 2914

capillary

bedding plants 6495

chicory 1151

pot plants 6495

chlorinated river water, lettuce, annual

report, UK 3613

citrus, annual report, Australia 1466

container-grown plants 8943

control, electric, greenhouse 883

cover crops compared, pear 2649

disease resistance

capsicum 4538

virus, capsicum 6053

drip

apple, annual report, UK 8318

avocado 2376

strawberry, annual report, Belgium

1060

vegetables 3624

water composition

onion 8638

radish 8638

economics

Argentina, sugar cane 6436

Cameroon, banana 4038

hop 3044

tea 856

equipment

banana 4039

citrus 4039

fertilizers

application

apple 947, 3394

bedding plants 6495

chrysanthemum 2185

container-grown plants, annual

report, UK 3834

lily 3869

pot plants 1687, 6495

flood

air temperature, banana 4037

Irrigation *contd.*flood *contd.*

disease control, celery 2144

nematode control, celery 2144

onion 232

soil temperature, banana 4037

water composition

onion 8638

radish 8638

flower, number, melon (cantaloup and musk) 8664

flower bud

drop, rose 3952

initiation, apple 5717

flowering, date, almond 2535

frost resistance, sugar cane 9233

fruit

composition

grapevine 6737

peach 6629, 7447

quality, citrus, annual report, Cyprus

3980

set, capsicum 6897

size, apple 6544

fruiting, apple 8359

furrow

capsicum, annual report, Cyprus 3604

carrot 7815

grapevine 1905, 3571

melon (cantaloup and musk) 4448

sugar cane 2468, 8209

annual report, USA 9221

green manures, cabbage 1165

Kölle system, pot plants 8849

leaf

composition

oil palm, annual report, Nigeria

9181

peach 7447

management, mist occurrence, frost,

protection 876

mats

paper, chrysanthemum 8859

plastic, chrysanthemum 8859

water uptake, types compared 8298

methods 3307

disease incidence, onion 3763

pot plants 1687, 2914

sloping sites 8299

methods compared

grapevine 3571

tomato, annual report, Netherlands

1135

needs, seasonal, root growth,

chrysanthemum 2186

pest incidence, peach 5033

photosynthesis, grapevine 4344

plant anatomy, sisal 9008

plant nutrition

almond 2534

bean (*Phaseolus*) 5975

cabbage 5191

peach 6629, 7447

rose 3952

strawberry, annual report, USA 1440,

5078

proteins, content, bean (*Phaseolus*) 5258

recommendations

apple 1734

hop, Czechoslovakia 343

onion 232

ornamental plants 1324

tulip 293

requirements

banana 9130

coconut 4052

determination

apple 6544

bean (*Phaseolus*) 171

capsicum 4537

grapevine 6736

hop 3043

pot plants 2914

sugar cane 6436, 7239

tea 856

tomato 1293

disorder incidence, citrus 3990

investigation, climatic control chamber

437

lawns and sports turf 8915

pea, for processing 8715

peach 7445

stone fruits 4160

Irrigation *contd.*requirements *contd.*

tea 429, 855

annual report, Sri Lanka 8262

tomato 2118

for processing 7778

varietal differences, grapevine 1925

walnut 4160

root

growth

apple 7367

peach 6628

saline and fresh water mixed, coconut

4052

saline water

coconut 4052

garlic 4518

plant composition, sugar cane 4888

salts concentration

grapefruit 3122

tulip 2257

sugar cane 6439

tulip 5436

salinity problems

avocado 2376

capsicum 4376, 4537

cucumber and gherkin 4376

melon (cantaloup and musk) 4376

onion 4376

sugar cane 407, 6439

report, USA 6382

tomato 4376

schedules, compared, peach 1820

shoot

composition, peach 7447

growth, apple 6544

soil

amendments, tomato 7784

chlorine content, melon (cantaloup and musk) 4448

compaction

citrus 3990

grapevine 1106

spray

equipment, coffee 6408

grapevine 4344

research, England 868

sugar cane 407

sprinkler

acaricides, application, citrus 3135

air temperature, banana 4037

avocado 2376

bean (*Phaseolus*) 171

capsicum 6891

carrot 7815

coffee 9165

container-grown plants, annual report,

UK 3834

damage

cucumber and gherkin 3624

grapefruit 3122

economics 3309

vegetables 1141

essential oil, mint 6264

frost, protection, annual report,

Netherlands 5

fruit trees and plants 2526

fungicides, application, citrus 3135

grapevine 3571

insecticides, application, citrus 3135

melon (cantaloup and musk) 4448

plant composition, mint 6264

soil temperature, banana 4037

sugar cane, annual report, USA 9221

vegetables 116, 3624, 4376

water distribution, apple 6515

sub-surface

grapevine 1905, 3571

sugar cane 2468

annual report, USA 9221

water composition

onion 8638

radish 8638

surface, bean (*Phaseolus*) 171

transpiration, diurnal variations, grapevine

6737

trickle

apple 3394, 4189

annual report, UK 3371

capsicum 4537, 6891

annual report, Cyprus 3604

fruit trees and plants 1046

greenhouse crops 1046

Irrigation contd.

- trickle contd.
 melon (cantaloup and musk) 4448
 peach, annual report, Australia 450
 small fruits 1046
 tomato, annual report, Australia 6769
 vegetables 1046, 4376
 trickle v. sprinkler, date 809
 vegetables, annual report, Australia 1133
 water
 composition
 boron
 fruit trees and plants 5163
 ornamental plants 5163
 vegetables 5163
 chlorine
 fruit trees and plants 5163
 ornamental plants 5163
 vegetables 5163
 sodium
 fruit trees and plants 5163
 ornamental plants 5163
 vegetables 5163
 soil salinity, sugar cane, annual report, Australia 9219
 conductivity, measurement, equipment 7286
 consumption, onion 6884
 weed control, lawns and sports turf 738
 weed incidence, lawns and sports turf 8915
 well-point system, coconut 4852
Isariopsis spp., control, bean (*Phaseolus*) diseases 8690
Isaris sinclairii, fungal parasite, *Mogannia hebes*, sugar cane 9257
Isatis tinctoria, glucobrassicins, biosynthesis 6255
Israel
 capsicum, growing 4530
 pistachio, growing 5058
Italy
 almond, production and trade 3364-3365
Boronia spp., growing 5479
 chestnut (*Castanea*), growing 5023
 essential oil plants 6244
 herbs 6244
 medicinal plants 6244
 nectarine varieties, review 6625
 peach varieties, review 6625
 spice plants 6244
 tomato, growing, for processing 6901
Itea ilicifolia, carbohydrates, metabolism 7056
Ivy
 ground cover plants 710
 juvenility 6217
 light, intensity, juvenility 6217
 photosynthesis
 seasonal variations 3913
 temperature 3913
 saponins, content, disease resistance 5464
 temperature, juvenility 6217
 weed control 710
Ivy diseases, *Pestalotia microspora*, host-pathogen relationships 5464
Ivy growth substances
 endogenous, shoot 3006
 juvenility
 abscisic acid 6217
 aminozide 6217
 GA 6217
Ixeuticus spp., predator on, *Aphytis melinus*, citrus 1494
Ixia, forcing 6165
Ixia seed
 composition 2943
 oil 2943
Ixora spp., annual report, USA 1441, 6129
Jacaranda spp.
 growing, in containers, root, growth control 7847
 planting
 root pruning 3007
 time 3007
 quinones 6239
 seedling, nursery treatment 3007
Jackfruit, fruit
 aroma 7171
 set, branch age 433
Janus piri, pear pests 1029
Japan
 apple, growing 5709

Japan contd.

- capsicum, growing 4530
 chestnut (*Castanea*), growing 5023
Jasmine
 breeding and selection, review, India 8840
 essential oil, extraction 5497
 fluorine, toxicity, plant tolerance 7845
 growing, India 8840
 sulphur dioxide, injury, plant resistance 7845
Jasmine diseases
Alternaria alternata 336
Cercospora spp. 336
Jossinia spp., leaf, anatomy 2483
Juglans manschurica, as a rootstock, walnut 8480
J. niger, as a rootstock, walnut 8480
J. regia, as a rootstock, walnut 8480
Juniper
 annual report, Netherlands 4604
 chromosome number 316
 growing
 in containers
 media 4689
 weed control 4614, 8853
 herbicides
 application, mulches 8853
 injury, dichlobenil 8853
 weed control 4614
Juniper diseases, *Phomopsis juniperovora* 5463
Juniper propagation
 cuttings, media 8844
 grafting, temperature, annual report, USA 3835
Juniperus spp.
 diseases, *Coniothyrium juniperi* 1388
 dormancy, phosphorus, absorption 3909
 phosphorus, absorption, dormancy 3909
 potting composts, bark 2276
 propagation
 cuttings
 annual report, Irish Republic 2909
 mist 5462
 under plastic 5462
 treatment, growth substances 5462
Juninea macrocephala, growing, for incense 6322
Jussiaea spp., taxonomy 266
Juvenility
 growth substances, *Ipomoea* spp. 6151
 ivy 6217
 leaf removal, cauliflower and broccoli 7644
 light, cauliflower and broccoli 7644
Malus spp. 4725
 review, trees and shrubs 5689
 temperature, cauliflower and broccoli 7644
Kakothrips robustus, vectors, *Botrytis fabae*, bean (*Vicia*) pests 8708
Kalanchoe blossfeldiana, growth substances, endogenous, determination 7026
K. pinnata, phenolic compounds 7934
K. spp.
 carbon dioxide
 evolution 8920
 fixation, darkness 4674
 copper, toxicity, cuttings, rooting
 inhibition 8929
 darkness, carbon dioxide, fixation 4674
 diseases, *Sphaerotheca humuli* 3904
 enzyme activity, photoperiodism, organic acids metabolism 8926
 enzymes, leaf, photoperiodism 7933
 flower
 bud initiation 3902
 petal, movements, light 8928
 flowering, inhibition, growth substances 4677
 growth substances
 endogenous
 biosynthesis 3902
 leaf 4677
 flowering
 inhibition
 abscisic acid 4677
 GA 4677
 xanthoxin 4677
 growth inhibition, cycloheximide 5455
 injury, TIBA 2976
 root, growth, IAA 5455

Kalanchoe spp. contd.

- growth substances contd.
 shoot, growth, GA 5455
 translocation 3902
 irradiation, X-rays, mutation induction 3903
 light, flower, petal movements 8928
 mutants, induction, irradiation, X-rays 3903
 organic acids
 biosynthesis, tissue culture 4678
 metabolism
 enzyme activity 8926
 photoperiodism 8926
 photoperiodism
 enzyme activity, organic acids
 metabolism 8926
 enzymes, content 7933
 flower bud, initiation 3902
 propagation
 cuttings
 rooting
 inhibition
 copper 8929
 tap water 8929
 plantlets, terminology 8927
 root, growth, growth substances 5455
 temperature, flower bud, initiation 3902
Kale
 chlorophyll, metabolism, growth substances 151
 nucleic acids, metabolism, growth substances 151
 pollination, mechanism 152
 proteins, metabolism, growth substances 151
 water potential, leaf 5930
 weed control, annual report, German Federal Republic 8579
Kale diseases
Plasmodiophora brassicae, varietal resistance 7640
 virus, annual report, UK 5153
Kale growth substances
 chlorophyll, metabolism 151
 nucleic acids, metabolism 151
Kale growth substances, proteins, metabolism 151
Kale varieties, disease resistance, *Plasmodiophora brassicae* 7640
Kalmia angustifolia, pigments, genetics 322
K. latifolia 7040
 propagation
 cuttings, source plants, age 7057
 grafting 7057
 seed 7057
K. spp., enzyme activity, determination 1063
Kerria spp., growth substances, retardants, chlormequat 6212
Kniphofia spp., tulipoides 8908
Kohl-rabi
 amino acids, biosynthesis, irradiation, gamma rays 5931
 annual report, Austria 114
 breeding and selection, annual report, Italy 6771
 carbon dioxide, supplementary, seedling raising 2880
 enzyme activity, respiration 6799
 growing
 under glass 5922
 in greenhouses, plastic 5923
 as an intercrop, *Strelitzia* spp. 8879
 growth studies 7639
 harvesting, once-over 5923
 herbicides
 application, pelleted seed, annual report, German Federal Republic 7598
 plant, thinning 7648
Kohl-rabi
 herbicides
 tolerance
 Ramrod 3662
 Semeron 3662
Kohl-rabi
 irradiation, gamma rays, amino acids, biosynthesis 5931
 light, supplementary, seedling raising 2880
 planting, spacing 1980, 5923
 pollen, size, viability 2763

- Kohl-rabi** *contd.*
 respiration
 enzyme activity ~ 6799
 temperature 6799
 seedling
 raising
 carbon dioxide, supplementary 2880
 light, supplementary 2880
 soilless culture, nutrient solution, mineral
 fertilizers 6075
 temperature 5922
 respiration 6799
 weed control 3662, 7648
 annual report, German Federal
 Republic 8579
- Kohl-rabi growth substances**
 endogenous, tuber 5197
 residues, plant, chlormequat 5198
- Kohl-rabi nutrition**, general, varietal
 responses 7639
- Kohl-rabi seed**
 sowing
 dates 5922
 spacing 7648
- Kohl-rabi soil**, moisture 7639
- Kohl-rabi tuber**
 ascorbic acid, content 6799
 composition, cytokins 5197
 sugars, content 6799
- Kohl-rabi varieties**, tetraploid and diploid
 compared 4422
- Korolkowia** spp., growing 5440
- Kumquat** fruit, pectins, content 3160
- Kumquat** pests, mites, biological control
 366
- Labiateae**
 stomata
 development 5494
 structure 5494
- Labour requirements**
 forcing, tulip 7016
 greenhouse, vegetables, annual report,
 Netherlands 1132
 growing
 carnations 1330
 flowers, annual report, Netherlands
 1314
 greenhouse crops 5156–5157
 harvesting
 asparagus fern 2268
 peach 6627
 sugar cane 5656
 nurseries, grapevine 553
 planting, asparagus fern 2268
 pruning and training, peach 6627
 raspberry 7491
 red currant 7491
- Laburnum**
 amino acids 8001
 pterocarpanoids 6233
 taxonomy, chemotaxonomy 6233
- Laburnum growth substances**, retardants,
 chlormequat 6212
- Laelia** spp., taxonomy, chemotaxonomy
 8934
- Laeliocattleya** spp., tissue culture, leaf,
 media 6207
- Lagenaria leucantha**, flower, sex 8665
- L. siceraria**
 flower, biology 3691
 as a rootstock, disease incidence,
 watermelon 1999
- L. spp.**
 cucurbitacin, content, pest resistance
 1194
 diseases
 mosaic virus 1189
 Sphaerotheca humuli 6823
 pests, *Aulacophora foveicollis*, varietal
 resistance 1194
 seedling, emergence, soil temperature
 4447
 soil, temperature, seedling emergence
 4447
- Lagerstroemia** spp., leaf, organic acids,
 content 1402
- Lamium amplexicaule**, as weeds, strawberry
 8509
- Landscaping**
 olive 3164
 ornamental plants 2908
 ornamental trees and shrubs 8940
 trees and shrubs 2908
- Lannea grandis**, as supports, grapevine
 6744
- Lansium domesticum**, fruit, aroma 7171
- Lantana camara**
 lactones 3079
 terpenes 3079
- L. indica**, essential oil, fungicidal properties
 6256
- L. spp.**
 essential oil, composition 1399
 essential oil content 1399
 plant composition 1399
 propagation, cuttings 2168
- Larkspur** flower, cut, preservatives 6161
- Laserpitium hispidum**, essential oil, content
 7983
- Lasiopus cilipes**, cacao pests 3185
- Laspeyresia caryana**
 biological control, pecan pests, annual
 report, USA 451
 pecan pests, annual report, USA 4945
- L. leucostoma**, tea pests, annual report,
 India 1657
- L. nigricana**, pea pests, annual report, UK
 3611
- L. woerberiana**, apricot pests 63
- Latex**, production, growth substances,
 papaw 7216
- Lathrolestes caudatus**, parasite of, *Ardis
 brunniventris*, rose, annual report,
 Netherlands 6961
- Latitude**, plant responses 5678
- Latonia arpatichaina**
 ornamental plants, pests 1329
 vegetables, pests 1329
- Laurus nobilis**
 herbicides
 toxicity
 dicamba 2495
 picloram 2495
 weed control 2495
- Lavandula** spp.
 essential oil, composition 7987
 terpenes 7966
- Lavender**
 essential oil 764, 6258
 composition, varietal differences 7986
 content
 nectar removal by bees 5899
 varietal differences 7986
 terpenoids 2326
 variety trials 4740
 terpenes 7966
- Lavender and lavandin**
 breeding and selection, essential oil 8996
 essential oil
 content, breeding and selection 8996
 quality, breeding and selection 8996
- Lavender diseases**
 alfalfa mosaic 3944
 yellows, mycoplasma, structure 762
- Lavender growth substances**
 endogenous
 leaf 2323
 shoot 2323
- Lavender propagation**, cuttings, rooting
 capacity, growth substances, endogenous
 2323
- Lavender soil**, types, essential oil production
 764
- Lavender varieties**
 comparative trials 7986
 essential oil, content 4740
- Lawns and sports turf**
 aeration 2968
 annual report
 Austria 265
 Canada 8836
 USA 1315, 1441, 2152, 3836, 6129,
 8834, 8839
 climate, microclimate 3296
 cold
 resistance 304
 nitrogen nutrition 304
 potassium nutrition 3895
 colour
 iron nutrition 3894
 nitrogen nutrition 304
 compressibility, determination 2174,
 4670
- Lawns and sports turf** *contd.*
 diseases
 Cercospora fusimaculans, on
 Stenotaphrum secundatum, control
 7023
 Corticium spp., control 8918
 Cristella confinis 7928
 decline, on *Stenotaphrum secundatum*
 2970
 downy mildew, on *Stenotaphrum
 secundatum* 2972
Fusarium nivale 1371, 2971, 6195
 control 8918
F. roseum, -nematode complex 6196
Marasmius oreades, incidence 7929
Ophiobolus graminis 4671
 control 8918
Puccinia coronata, on *Festuca* spp.
 5449
P. stenotaphri, on *Stenotaphrum
 secundatum* 6197
 resistance, review 6194
Sclerotinia borealis 1371, 6195
S. homoeocarpa, control 8918
Spermopora subulata, annual report,
 Canada 3882
Typhula inoarmata 6195
T. ishikariensis 6195
Ustilago striiformis, control 5450
 establishment 3889
 alpine sites 3887
 car parks 7919
 Finland 7020
 roadside 3886, 3888
 steep slopes 3887
 Yugoslavia 2966
 fibre mats installed at various depths
 8912
 fungicides, interaction, nematicides 2266
 grass composition, sulphur 6193
 grasses
 Agrostis spp., variety trials 7021, 7918
 A. tenuis 7919
 mowing 8916
 nitrogen nutrition 8916
 breeding and selection
 Austria 7018
 disease resistance 6195
 Finland 7019
 German Federal Republic 5441
 Poa spp. 1370
 Sweden 3884
 Cynodon dactylon 7915
 Cynosurus spp., variety trials 7021
 disease resistance, review 6194
 Festuca spp. 7919
 mowing 8916
 nitrogen nutrition 8916
 variety trials 7021, 7918
 weed incidence 8915
 Finland, review 6191
 Lolium perenne 7915, 7917
 L. spp.
 variety trials 7021
 weed incidence 8915
 Netherlands, review 5442
 Phleum spp., weed incidence 8915
 Poa pratensis 5443, 7919
 mowing 8916
 nitrogen nutrition 8916
 Poa spp. 7915, 7917
 variety trials 7021
 weed incidence 8915
 Stenotaphrum dimidiatum, tropics 300
 variety trials, Norway 3885
 growth substances
 retardants
 3-carboxy-2-pyridones 3334
 chlorthalcof 2263
 chlormequat 2263
 MH 2263
 tillering
 chlorthalcof 2263
 chlormequat 2263
 herbicides
 absorption, endothall 5445
 injury, pronamide 7922
 metabolism, endothall 5445
 translocation, endothall 5445
 irrigation
 requirements 8915
 weed control 738
 weed incidence 8915

Lawns and sports turf *contd.*

- management
 - Finland 7020
 - France 7022
 - Yugoslavia 7915
- moss control 7921
- mowing
 - height 7924
 - machines compared, grass population 8916
 - weed control 738
- nematicides, interaction, fungicides 2266
- nutrition
 - fertilizers 7022
 - application, top-dressing 2264
 - iron, grass colour 3894
 - nitrogen
 - application, time, cold, resistance 304
 - disease incidence 7023, 8918
 - grass colour 304
 - grass population 8916
 - sources, compared 6193
 - NPK 7926
 - soil type 7927
 - potassium
 - cold, resistance 3895
 - sources, compared 6193
- overseeding 2264
- pests
 - Amphimallon majalis* 7930
 - Cricnemoides ornatus* 2265
 - Helicotylenchus pseudorobustus* 2265
 - Herpetogramma licarsialis* 5451
 - Hoplolaimus galeatus* 2265
 - nematodes 4672
 - varietal resistance 4672
 - Oscinella frit* 2973
 - Spodoptera mauritia* 5451
 - Tylenchorhynchus claytoni* 2265
 - Tylenchorhynchus dubius* 2266, 6198
 - disease relationships 6196
 - Xiphinema americanum* 2265
- plants, *Trifolium* spp., Norway 3885
- quality, evaluation 3891
- re-seeding 3891
- renovation 3891
- research, Finland 7019
- retardants, growth substances 2263
- rolling 7923
- root, sampling 3883
- seed
 - mixtures 2967
 - car parks 7919
 - orchard tracks 3890
 - roadside 3886
- production 3896
- sowing
 - depth 5447
 - methods 3886-3887
 - car parks 7919
 - tillering 6192
- soil
 - amendments 2969, 7022
 - conservation 2969
 - heating 7920
 - systems 3889
 - preparation 2262
 - structure 2969
- thatch
 - development 2174, 4670, 8917
 - removal 2264
 - methods compared 7925
- tillering 5447
 - growth substances 2263
 - seed sowing, methods 6192
- tree root competition 303
- turf, rooting 301-302
- weed control 738, 1681, 3892, 4924, 5444-5446, 7922, 8913-8914
- Agropyron repens* 5443
- annual report
 - Canada 2154
 - German Federal Republic 8837
- Dactylis glomerata* 5443
- Festuca elatior* 5443
- irrigation 738
- mowing 738
- mowing height 7924
- Pennisetum clandestinum* 739
- weeds
 - Poa annua* 7916
 - Poa* spp. 7922, 8913

Lawns and sports turf *contd.*

- winter hardiness 3895
- Lead**
- absorption, eggplant 2851
 - contamination, cabbage, annual report, German Federal Republic 7599
 - content
 - fruit, air pollution, grapevine 5837
 - roadside plants, trees and shrubs 440
 - determination
 - apple 4389
 - atomic absorption spectrophotometry
 - beetroot 6784
 - cabbage 6784
 - chicory 6784
 - lettuce 6784
 - fruit 4389
 - grapevine 1128
 - vegetables 4389
 - leaf analysis, standards, fruit trees and plants 2496
 - nutrition
 - bean (*Phaseolus*) 173
 - tomato 173
 - residues
 - apple, annual report, German Federal Republic 6506
 - fruit 4936
 - vegetables 4936
 - toxicity, vegetables, tissue culture 121
 - translocation, eggplant 2851
- Leaf**
- abscission
 - anatomy, olive 5592
 - ethylene, bean (*Phaseolus*) 2035
 - abscission layer, enzyme activity, bean (*Phaseolus*) 2035
 - age, cell injury resistance, *Zebrina pendula* 5457
 - amino acids
 - content
 - disease incidence, orange 2393
 - soil, oxygen concentration, orange 2393
 - analysis
 - atomic absorption spectroscopy, pecan 1844
 - fruit trees and plants, annual report, Belgium 902
 - methods, sugar cane nutrition 413
 - methods compared 3302
 - sample storage 3173
 - sampling
 - age, sugar cane 412
 - apple 1742
 - position, oil palm 8167
 - strawberry 6693
 - time of, sugar cane 412
 - walnut 99
 - symposium 2489
 - anatomy, toxins, fusicoccin, bean (*Phaseolus*) 4487
 - area
 - measurement
 - grapevine 4349
 - oil palm 7207
 - photoelectric scanner 5673
 - photosynthesis, productivity, pear 5053
 - press-frame 8288
 - rubber 3251
 - statistical techniques, mango 1594
 - light, reflection, diseases, annual report, USA 599
 - maturity, grapefruit, annual report, USA 790
 - movements, phytochrome, *Albizia* spp. 5265
 - optical properties, measurement techniques 6485
 - removal
 - chemical
 - brussels sprouts, annual report, Irish Republic 1939
 - hop 3958
 - sugars, metabolism, apple 3414
 - senescence 4940
 - amino acids, content, tomato 1297
 - ascorbic acid, treatment, eggplant 671
 - growth substances 1978, 4940
 - GA
 - eggplant 671
 - tomato 1297

Leaf *contd.*

- senescence *contd.*
 - growth substances *contd.*
 - kinetin, eggplant 671
 - MH, tomato 1297
 - light, duration, tomato 1297
 - nitrogen absorption 2571
 - nucleic acids, bean (*Phaseolus*) 2879, 5244
 - soil salinity
 - bean (*Phaseolus*) 2879, 5244
 - mesembryanthemum 2941
 - shape, recording technique, numerical 872
 - size, measurement, statistical technique, legumes 7
 - wax, growth substances, absorption, pear 5054
- Lecanium deltae***, parasites, Hymenoptera, citrus pests 6351
- Lecythidaceae**
- growing, tropical America 5598
 - nomenclature 5598
 - uses 5598
- Ledum palustre***, as medicinal plants 5538
- Leek**
- alkanes, biosynthesis 2829
 - annual report
 - Netherlands 8581
 - UK 3613
 - bolting 4519
 - photoperiodism 5300
 - temperature 5300
 - cadmium, determination 4389
 - growing
 - frames 2737
 - media, compared 7605
 - peat 7605
 - use of plastic materials 2738
 - harvesting
 - mechanical, annual report, Netherlands 1132
 - time of, planting, time 4519
 - lead, determination 4389
 - photoperiodism 5300
 - planting
 - v. direct sown 6873
 - time 4519
 - proteins, determination, electrophoresis 4384
 - stomata, guard cells, cytology 8736
 - storage 229
 - temperature 5300
 - transplanting v. direct sown 1246
 - weed control 661, 5680, 6024, 6028
 - annual report
 - German Federal Republic 8579
 - UK 1936
 - review 5306
 - winter hardiness 4519
- Leek bulb**
- development
 - photoperiodism 5300
 - temperature 5300
- Leek diseases**
- Alternaria porri* 661
 - Fusarium* spp. 661
 - Leptotrichia porri* 661
 - Peronospora* spp. 661
 - Phytophthora porri* 661
 - Puccinia allii* 661
 - Urocystis cepulae* 661
- Leek flower**
- stem
 - development
 - photoperiodism 5300
 - temperature 5300
- Leek nutrition**, nitrogen, sources, compared 119
- Leek pests**
- Acrolepia assectella* 662
 - Dizygomyza cepae* 662
 - Hylemya antiqua* 662
 - Meloidogyne* spp. 662
 - Thrips tabaci* 662
- Leek plant**, composition, organic compounds, nitrogen, sources 119
- Leek root**
- growth
 - photoperiodism 5300
 - temperature 5300

- Leek seed**
 germination
 pelleted seed 3623
 temperature 5299
 production, annual report, Belgium 4363
 sowing
 dates 4519
 depth 5299
 direct v. transplanting 6873
 treatment, pelleted 3623
- Leek soil, moisture, 696**
- Leek varieties**
 annual report, UK 1937, 5149
 comparative trials 3758
- Legumes**
 anthocyanins, content 8705
 as a cover crop, rubber 8178
 ground cover plants, rubber 4881
 leaf, size, measurement, statistical technique 7
 mulching, plastic 4378
 pigments, content 8705
 soil, cultivation 4378
- Leguminosae**
 fruit species, American tropics 9122
 growing, American tropics 9122
 nomenclature 9122
 value 9122
- Lemairocereus spp., edible fruits 822**
- Lemon**
 amides, content, leaf, *Deuterophoma tracheiphila* 8061
 amino acids
 content
 leaf 8061
 Deuterophoma tracheiphila 8061
 annual report
 Australia 4782
 Cyprus 3980
 USA 8051
 ascorbic acid
 content
 fruit, *Phytophthora citrophthora* 6347
 nitrogen nutrition 3113
 potassium 3113
 breeding and selection
 disease resistance, *Deuterophoma tracheiphila* 7126, 7144, 9078
 interspecific hybridization 5545
 Italy 792-793
 carbohydrates
 biosynthesis, tissue culture 1496
 content
 disease resistance 3131
 frost resistance 3131
 fruit 9108
 leaf 9108
 chlorophyll, content, plant nutrition 9100
 cold, resistance, plant nutrition 1483
 economics 1502
 essential oil
 content, peel, varietal differences 4022
 volatile constituents 2412
 flowering, autumn, nutrition 1483
 frost
 protection
 covers, pruning and training 3110
 temperature data 6335
 resistance 3101
 carbohydrates, content 3131
 nitrogen, content 3131
 polypoids 7129
 fungicides
 application
 adjuvants 3130
 methods compared 3130
 residues
 determination
 benomyl 6501
 thiabendazole 6501
 fruit
 biphenyl 9107
 phenylphenol 9107
 growing
 Mozambique 360
 protected cultivation 6336
 review 792
 trenches 6336
 harvesting, systems, economics 2408
 hybrids, interspecific 5545
 lactones 6367
- Lemon contd.**
 mutagens, disease resistance,
 Deuterophoma tracheiphila 8060
 nematocides, application, methods compared, Nematicur 3133
 nitrates, content, NPK nutrition 2384
 nitrogen
 content
 disease resistance 3131
 frost resistance 3131
 organic acids 6783
 content, fruit, *Phytophthora citrophthora* 6347
 photosynthesis 6353
 plant nutrition 9100
 phytoncides 3129
 planting
 high density 3104
 spacing 3104
 products and by-products, juice, characterisation, amino acids, composition 1508
 proteins, content, varietal differences 3131
 pruning and training
 mechanical 5554
 methods compared 3109, 3992, 5554
 protected cultivation 3110
 respiration
 ethylene, production 383
 fruit, *Phytophthora citrophthora* 3153
 ringing, photosynthesis 6353
 shade, pruning and training 3992
 storage
 dips
 disease control
 Diplodia spp. 6363
 Geotrichum spp. 6363
 Penicillium digitatum 6363
 Phomopsis spp. 6363
 wax coatings, rot control 6363
 tissue culture, embryo, media 3142
 transport
 containers, compared 1507
 pre-cooling, temperature, container-4016
 water relations, flower bud, initiation 7150
 weed control 7131
 Convolvulus spp. 7131
 wind, damage, pruning and training 3992
- Lemon diseases**
Deuterophoma tracheiphila 365
 fungicides, application, methods compared 3130
 host amino acids, content 8061
 iron, nutrition 364
 phytoncides 3129
 resistance 8060
 breeding and selection 7126, 7144, 9078
 toxins, chlorophyll, biosynthesis 4801
 varietal resistance 3131
Diplodia spp., storage dips 6363
Geotrichum candidum, irradiation 2411
G. spp., storage dips 6363
Penicillium digitatum, storage dips 6363
Phomopsis spp., storage dips 6363
Phytophthora citrophthora
 fruit composition 6347
 respiration, fruit 3153
 rumple 8074
 tatterleaf-citrus stunt complex, control, heat treatment 6328
Xanthomonas citri, pathogen survival 5561
- Lemon disorders**
 rumple 3998
 storage spot 4812
- Lemon flower**
 bud initiation
 growth substances 7150
 water relations 7150
 pigments, content 8088
- Lemon fruit**
 ascorbic acid 3158
 colour, growth substances, ethephon 2407
 composition 5575
 rootstocks 4788
 coumarins, content 8446
 flavonoids 8102
- Lemon fruit contd.**
 flavour, irradiation, ionizing 2411
 hydrocarbons, varietal differences 3156
 injury, resistance 9103
 irradiation
 gamma rays, mechanical injury resistance 9103
 ionizing
 disease control 604
 injury, tainting 604
 post-harvest, storage life 2411
 loosening, growth substances, ethephon 2407
 maturity, colour, juice content 3159
 pigments, metabolism 4005
 ripening
 growth substances, GA 1502
 propylene treatment 383
 wax coatings, mechanical injury resistance 9103
- Lemon growth substances**
 flower bud
 initiation
 chlormequat 7150
 GA 7150
 fruit
 colour, ethephon 2407
 loosening, ethephon 2407
 ripening, GA 1502
- Lemon leaf**
 ascorbic acid 3158
 nutrients
 content
 seasonal variations 3114
 varietal variations 3114
 pigments 3139
 content, plant nutrition 3112
- Lemon nutrition**
 boron 1483
 cold, resistance 1483
 flowering, autumn 1483
 calcium, photosynthesis 9100
 copper 1483
 FYM, photosynthesis 9100
 general
 chlorophyll, content 9100
 leaf analysis 3114
 iron, disease resistance 364
 manganese 1483
 cold, resistance 1483
 flowering, autumn 1483
 molybdenum 1483
 nitrogen
 leaf analysis 2384
 photosynthesis 9100
 NPK
 ascorbic acid, content 3113
 leaf, pigments 3112
 photosynthesis 9100
 phosphorus, leaf, composition 2384
 potassium, leaf, composition 2384
 sewage sludge, photosynthesis 9100
 zinc 1483
- Lemon pests**
Aonidiella aurantii, resistance 3134
 mites, biological control 366
Pratylenchus coffeae 3133
- Lemon rootstocks**
Citrus junos 4788
C. macrophylla 8063
 comparative trials, USA 8063
Poncirus trifoliata 3101
 -scion relationships
 frost resistance 3101
 fruit, composition 4788
- Lemon, rough**
 as an interstock, grapefruit 5559
 as a rootstock
 citrus 3988, 4795
 disease resistance, grapefruit 9092
 grapefruit 5559
 orange 795
- Lemon varieties**
 disease resistance, *Deuterophoma tracheiphila* 3131, 9091
 essential oil, production 4022
 frost, resistance, leaf, composition 3131
 fruit, hydrocarbons 3156
 leaf, composition, seasonal variations 3114
 register, USA 4156
 review 792
- Lentinus edodes, edible fungi 6122, 6958**

Lepidosaphes beekii

- orange pests 7147
- resistance, NPK nutrition, orange pests 2397

Lepidosaphes pallida, population studies, mango pests 9179-9180**L. ulmi**, apple pests, annual report, Netherlands 5698**Lepista nuda**, edible fungi 6958**Leptochloa** spp., as weeds, sugar cane 405**Leptospermum petersonii**, essential oil, Australia 4737**Leptosphaeria coniothyrium**, raspberry diseases 2687**L. spp.**, spore numbers, grapevine diseases 5858**L. taiwanensis**

- resistance, sugar cane diseases 4087
- varietal resistance, sugar cane diseases 4083

Leptothrips mali, predator on, *Panonychus ulmi*, apple 4213**Leptotrichila porri**, leek diseases 661**Leskia aurea**, biological control of, *Aegeria myopaeformis* 3409**Lettuce**

- amino acids, proteins, content, water deficiency 3628
- annual report
 - Austria 114
 - Belgium 1131
 - German Federal Republic 7597-7598, 7600, 8579
 - Irish Republic 1939
 - Netherlands 1132, 1135, 5151, 8581
 - New Zealand 5152
 - UK 1934, 1937, 3613, 4366, 5149, 5884, 6774, 8584
 - USA 3618, 4368, 7601, 8585
- ascorbic acid
 - content
 - latitude 5678
 - molybdenum nutrition 7630
 - degradation, storage 7636
- bolting, growth substances 5914
- breeding and selection
 - annual report, USA 3616
 - disease resistance, *Sclerotinia sclerotiorum* 4403
- F₁ hybrids, annual report, USA 3617
- carbon dioxide
 - injury 5915, 6782
 - carbon monoxide 1157
 - oxygen 1157
 - supplementary 3640
 - supplementary from diesel exhaust, injury 3625
- carotene
 - content, molybdenum nutrition 7630
 - degradation, storage 7636
- chlorophyll, content, seedling, growth substances 6789
- copper, toxicity 2754
- enzyme activity, plant, copper, toxicity 2754
- ethylene, seed, germination 6788
- fluoroacetate, metabolism 3650
- fungicides
 - persistence, dichlozoline 7633
- residues
 - determination
 - benomyl 7609
 - quintozene 3331
 - thiophanate 7610
 - plant, thiram 7634
- growing
 - frames 2737
 - in frames, plastic 4410
 - under glass 1139, 1686, 1974
 - artificial illumination 877
 - economics 5156-5157
 - for harvesting throughout the year 1961
 - labour requirements 5156-5157
 - under plastic, annual report, UK 6773
 - winter harvesting 3640
- in greenhouses
 - glass, plastic 2738
 - light 8611
 - plastic 5923
 - temperature 8611

Lettuce contd.

growing contd.

- for harvesting throughout the year 1974
- peat
 - nutrition
 - minor elements 4382
 - molybdenum 7628
 - peat blocks 7626
 - under plastic 1686, 2499, 5910
 - weed control 7627
 - protected cultivation 2159, 2159, 5159
 - tunnels 1261, 1686, 2753
 - harvesting dates 1156
- growth studies, temperature 8610
- harvesting
 - once-over 5923
 - time of, sowing, dates, autumn production, Netherlands 1966
- heat treatment, virus control 7631
- herbicides
 - application, irrigation 6905
 - injury
 - dacthal 8605
 - dichlorprop 1967
 - 2,4-D 1967
 - MCPA 1967
 - mecoprop 1967
 - 2,3,6-TBA 1967
 - 2,4,5-T 1967
 - residues
 - application, methods, pyrazon, dalapon, RH 315, DCPA, nitralin, trifluralin 1949
 - diquat 6905
 - paraquat 6905
- insecticides
 - application
 - as emulsifiable concentrates, chlorpyrifos 2506
 - as granules, chlorpyrifos 2506
 - residues
 - arsenic 3329
 - determination, chlorpyrifos 4142
 - plant
 - chlorpyrifos 2506
 - determination 3330
 - lead arsenate 1951
- irrigation, sprinkler 1116
- lead
 - determination, atomic absorption spectrophotometry 6784
 - residues 4936
- light
 - artificial, seedling raising 8604
 - intensity 1975
 - growth 1973
 - interaction, temperature 1973
 - leaf, initiation 1973
 - plant, weight 8611
 - supplementary 1975
- manganese, content, plant, soil steaming 8606
- mulching, plastic 2753, 4377
- net assimilation rate 3649
- nitrite, toxicity 5893
- nucleic acids, content, seedling, growth substances 6789
- nutrient absorption
 - major element 5911
 - minor elements 5911
- nutritional value 4388
- amino acids 3628
- ozone, injury, varietal resistance 5178
- packing 1979
- photoperiodism, interaction, temperature 1975
- pigments, content, seedling, growth substances 6789
- plant, anatomy, epidermis 4402
- planting
 - methods compared 2752
 - spacing 134, 5923
 - net assimilation rate 3649
- proteins
 - biosynthesis, growth substances 137
 - content, seedling, growth substances 6789
- seedling
 - emergence, soil, compaction 4409
- growth
 - inhibition
 - Coronilla varia* seed leachate 7625

Lettuce contd.

seedling contd.

growth contd.

inhibition contd.

- growth substances, asparagusic acid 4517
 - raising, light, artificial 8604
 - transport, containers, plastic 4375
 - soiless culture 4379
 - annual report, France 3605
 - stomata, development 4402
 - storage
 - controlled atmosphere
 - carbon dioxide injury 6790
 - leaf, senescence 1978
 - temperature, plant, weight loss 7636
 - sugars
 - content, seedling, growth substances 6789
 - degradation, storage 7636
 - temperature
 - growth 1973
 - growth studies 8610
 - interaction
 - light, intensity 1973
 - photoperiodism 1975
 - plant, development 8611
 - tissue culture 121
 - cotyledons 139
 - pith, xylem formation, growth substances 7635
 - transpiration 1972
 - evapo-, measurement 4413
 - transport 1979
 - containers, carbon dioxide concentration 2756
 - water relations 1972
 - plant, proteins, amino acids, content 3628
 - weed control 603, 3615, 4411, 5680, 7627, 8605, 8817
 - annual report, UK 5885
 - review 5182
 - weeds, alternative hosts, virus diseases 7631
 - winter hardiness, sugars, content 7662
- Lettuce diseases**
- beet western yellows 1969, 4412
 - bidsen mottle 5912
 - Botrytis cinerea* 7633
 - calcium nutrition 865
- B. spp.**
- control 7626
 - fungicides, application, method, quintozene 1970
- Bremia lactucae**
- assessment methods 5165
 - infection process 7632
 - varietal resistance 1962, 1964, 4404, 6787
- Erwinia carotovora* 5915
- internal rib necrosis 4412
- mosaic 4412, 5912
- necrotic yellows 7631
- alternative hosts, *Sonchus oleraceus* 7631
 - report, Australia 3602
- vectors, *Hyperomyzus lactucae* 7631
- Pseudomonas marginalis* 5916
- Rhizoctonia* spp., fungicides, application, method, quintozene 1970
- Sclerotinia minor* 135, 5184, 7633
- S. sclerotiorum* 7633
- varietal resistance 4403
- S. spp.*, incidence 5910
- virus, annual report, Netherlands 6772
- Xanthomonas vitians* 8608
- varietal resistance 8608
- Lettuce disorders** 5915
- brown stain, carbon dioxide, injury 1157
 - leaf margin browning, annual report, German Federal Republic 7599
 - marginal leaf scorch, resistance, soil sterilization 8606
 - tipburn, resistance, soil sterilization 8606
- Lettuce growth substances**
- absorption, abscisic acid 8609
 - bolting, GA 5914
 - chlorophyll, content, GA 6789
 - chlorosis, GA 6789
 - growth inhibition, chloramphenicol 8607
 - injury
 - 2,4-D 609

Lettuce growth substances *contd.*

- injury *contd.*
 - GA 5914
- interaction, potassium nutrition 8607
- leaf
 - senescence
 - GA 1978
 - kinin 1978
- metabolism, abscisic acid 8609
- plant
 - composition, GA 6789
 - weight
 - 2,4-D 609
 - GA 5914
 - IAA 609
- responses, histology 138
- seed, production, GA 5914
- seedling, growth, inhibition, asparagusic acid 4517
- xylem
 - formation
 - cytokinin 7635
 - IAA 7635

Lettuce leaf

- senescence, growth substances 1978
- sugars, content, seasonal variations 7662

Lettuce nutrition

- major elements, absorption 5911
- minor elements 608
 - absorption 5911
- molybdenum
 - deficiency, growing in peat 4382, 7628
 - varietal responses 7630
- nitrogen 1950, 3648
 - ammoniacal concentration 1968
 - availability 117
- NPK 1143
- phosphorus 3648
 - availability 120
 - leaf analysis 5183
 - net assimilation rate 3649
 - soil adsorption 5183
 - soil analysis 7629
- potassium 3648, 8607
 - annual report, USA 1935
 - interaction, growth substances 8607
- zinc, tissue culture 121

Lettuce pests

- Agrotis* spp. 1971
- Autographa californica* 1158
- Hyperomyzus lactucae*, vectors, necrotic yellows 7631
- Meloidogyne hapla* 2761
- Myzus persicae* 1158
 - virus vectors, beet western yellows 1969
- Pemphigus bursarius* 1159
 - resistance 3643
 - varietal resistance 1159
- slugs 1971
- Trichoplusia ni*, biological control 5913

Lettuce plant

- composition, analysis methods tissue preparation 5170
- development 4414
 - light, intensity 8611
 - temperature 8611
- quality, soil sterilization 8606
- shape, soil sterilization 8606
- weight, growth substances 5914

Lettuce root, growth 1147**Lettuce seed**

- ethylene, content 6788
- germination
 - ethylene 6788
 - ethylene production 1977
 - inhibition 1155
 - copper 2754
 - darkness 5181
 - growth substances 3644, 3647
 - light
 - blue 5180
 - far-red 5180
 - irrigation 5185
 - light 5909
 - far-red 1976, 4408
 - far red, ethanol 4408
 - red 1976-1977, 4408
 - ethanol 4408
 - media 5185
 - pelleted seed 3623
 - under plastic 5185
 - polysome formation 5181

Lettuce seed *contd.*

- germination *contd.*
 - seed, size 3645
 - soil, moisture 4409
 - sources
 - temperature 3646
 - water relations 3646
 - temperature 3645-3646, 5185
 - ethylene 6788
 - ethylene production 1977
 - water relations 3646
- production, growth substances 5914
- sorting, air flow 4373
- sowing
 - dates
 - autumn production, Netherlands 1966
 - USSR 4407
 - depth, germination 3645
 - mechanical, equipment 6939
 - peat 7606
 - spacing 5908
- treatment
 - ethylene 6788
 - carbon dioxide presence 1154
 - fungicides 3622
 - gamma rays, injury 1965
 - growth substances
 - CCC 137
 - ethephon 3647
 - IAA 3647
 - kinetin 3647
 - NAA 3647
 - light
 - far-red 136, 1976
 - red 136, 1976, 6788
 - nutrients, potassium 137
 - pelleted 3623
 - annual report
 - Canada 2734
 - UK 5153
 - protons, injury 1965

Lettuce soil

- amendments
 - polystyrene, nutrient availability 117
 - urea formaldehyde foam resins, nutrient availability 117
- compaction 4409
- fumigation
 - residues
 - plant, methyl bromide 2755
 - soil, methyl bromide 2755
- pH 1968
- steaming, temperature 8606
- sterilization
 - steam
 - disorder resistance 8606
 - plant quality 8606
 - plant shape 8606

Lettuce varieties 134

- Anita 6787
- annual report
 - Canada 1944
 - UK 1936
- Brazil 1963
- comparative trials
 - annual report
 - Canada 5883
 - UK 8583
 - German Democratic Republic 1964
 - German Federal Republic 4404-4405
 - Netherlands 6787
- disease incidence, *Sclerotinia sclerotiorum* 4403
- disease resistance
 - Bremia lactucae* 1962, 6787
 - internal rib necrosis 4412
 - Xanthomonas vitians* 8608
- Domineer 4406
- Fairton 5179
- France 1153
- greenhouse 3641-3642, 4406, 6787
 - for harvesting throughout the year 1961
 - winter harvesting 2751
- herbicides, tolerance, annual report, UK 5154
- identification, seedlings 8603
- Netherlands 1962
- Noran 6787
- ozone, injury, resistance 5178
- pest resistance, *Pemphigus bursarius* 1159

Lettuce varieties *contd.*

- Selma 6787
- storage, controlled atmosphere, carbon dioxide injury 6790
- winter harvesting, comparative trials 2751
- Leucaena** spp.
 - ground cover plants, coffee 7190
 - as weeds, vegetables 1946
- Leucas aspera*, essential oil, fungicidal properties 6256
- Leucoplema* spp., coffee pests, annual report, Nigeria 4035
- Leucoptera meyricki*, coffee pests 1583
- L. spp.**
 - coffee pests 6407
 - annual report, East African Community 5617
- Leucospermum* spp., taxonomy 1397
- Leucostoma cincta*
 - incidence, pruning and training, peach diseases 8455
 - peach diseases 80
- L. persoonii*, peach diseases 80
- Leucothoe grayana*, terpenoids 7999
- L. spp.**
 - enzyme activity, determination 1063
 - enzymes, extraction 8949
- Leveillula* spp., mint diseases 336
- L. taurica*
 - control, capsicum diseases 6042
 - okra diseases 160
 - relative humidity, tomato diseases 8781
 - temperature, tomato diseases 8781
- Levisticum** spp.
 - ascorbic acid, content, leaf 4728
 - carotene, content, leaf 4728
- Libanotis condensata*, coumarins 6283
- Liberia, rubber, growing 8184
- Libocedrus** spp.
 - dormancy, phosphorus, absorption 3909
 - phosphorus, absorption, dormancy 3909
- Licania platypus*, fruit, description 9282
- Lichens, medicinal properties, survey 775
- Light** (*see also* Dark; Photoperiodism)
 - absorption
 - leaf
 - measurement techniques 6485
 - squash, annual report, USA 600
 - pruning and training, methods compared, apple 4963
 - artificial
 - book 8307
 - chrysanthemum 1334
 - cucumber and gherkin, annual report, Netherlands 1135
 - cyclic and continuous compared, carnation 2181
 - equipment 887
 - greenhouse crops 877
 - ornamental plants 8841
 - flowering
 - ornamental plants 8841
 - rose 5477
 - fruit, ripening, banana 4836
 - seedling raising, lettuce 8604
 - sources, laser-emitted, flowering, chrysanthemum, report, Australia 3831
 - sources compared
 - bulb, development, onion 3767
 - growing rooms, grapevine 5139
- blue**
 - carbon, metabolism 1673
 - enzyme activity, bean (*Vicia*) 8712
 - leaf
 - growth, pea 3738
 - movements, *Albizia* spp. 5265
 - pigment stability, cucumber and gherkin 2776
 - responses, varietal differences, cucumber and gherkin 8660
 - seed, germination, *Nemophila* spp. 3861
 - carbon dioxide, evolution, mustard 7073
 - chlorophyll
 - biosynthesis
 - bean (*Phaseolus*) 4505
 - pea 4505
 - content, watermelon 7690
 - chloroplast, number, spinach 4394

Light contd.

- coloured
 amino acids, biosynthesis, *Salvia sclarea* 7085
 disease incidence, enzyme activity, celery 8816
 disease resistance, tomato 4575
 enzyme activity
 orange 7149
 tomato 4575
 essential oil, composition, chamomile 3081
 leaf, composition, orange 7149
 phytochrome
 degradation
 Amaranthus spp. 3736
 Mirabilis spp. 3736
 pea 3736
 proteins, biosynthesis, *Salvia sclarea* 7085
 shoot, growth, orange 7149
 sugars, biosynthesis, *Salvia sclarea* 7085
 duration
 growth studies, chrysanthemum 7859
 leaf, senescence, amino acids, content, tomato 1297
 respiration, chrysanthemum 7860
 emission, leaf, drought resistance, strawberry 8508
 enzyme activity 1673
 cotyledons
 growth substances, fenugreek 3977
 watermelon 7690
 leaf, sugar cane 8251
 pea 7733
 ethylene production, inhibition, cabbage 8630
 far-red
 calcium, metabolism, bean (*Phaseolus*) 7713
 chlorophyll
 biosynthesis
 bean (*Phaseolus*) 4505, 7715
 pea 4505
 cold resistance, weigela, pyracantha 5485
 enzyme activity, mustard 7980
 growth substances, endogenous, pea 4514
 leaf
 development, bean (*Phaseolus*) 3716
 growth, pea 3738
 photosynthesis, vegetables 7806
 responses, mustard 334
 seed
 germination
 lettuce 136, 1976
 Nemophila spp. 3861
 flower, petal movements, *Kalanchoe* spp. 8928
 frost
 injury, chloroplast damage, cucumber and gherkin 2003
 resistance, black currant 4310, 6671
 fruit
 composition, cherry 5761
 size, cherry 5761
 growth substances, absorption, pear 3495
 infra-red
 fruit
 colour, tomato 8797
 ripening, tomato 8797
 intensity
 anthocyanins, biosynthesis, cranberry 8498
 apical dominance, bean (*Phaseolus*) 8698
 boron, absorption, sugar cane 4102
 carbohydrates, content, apple 1731
 carnation 3840
 disease incidence, enzyme activity, celery 8816
 disease resistance
 capsicum 4538
 tomato 4575
 disorder incidence, petal blueing, rose 7949
 enzyme activity
 peach 3491
 pear 3491
 tomato 4575

Light contd.

- intensity contd.
 flower, development, tomato 2132, 6931
 flower bud
 initiation
 cyclamen 8887
 olive, annual report, Italy 8050
 Pharbitis spp. 3848
 flowering
 Aeschynanthus spp. 7951
 alstroemeria 7875
 fruit trees and plants 1708
 peach 3491
 pear 3491
 rose 5477
 tagetes 2217
 fruit
 colour
 apple 7354
 fruit trees and plants 1708
 disorders, apple 2605
 distribution, mandarin and tangerine 8064, 8067
 drop, persimmon 3168
 set, grapevine 5836
 size
 apple 7354
 fruit trees and plants 1708
 sugars, content, grapevine 564
 fruiting, precocity, cucumber and gherkin 1995
 growth
 apple 1731
 chrysanthemum 272
 lettuce 1973
 growth studies, chrysanthemum 7859
 heterosis expression, antirrhinum 3853
 interaction
 growth substances, apple 1731
 photoperiodism
 rose 6230
 tagetes 2217
 temperature
 lettuce 1973
 rose 6230
 juvenility, ivy 6217
 leaf
 ascorbic acid
 content
 peach 3491
 pear 3491
 characters, capsicum 2095
 chlorophyll
 content
 mandarin and tangerine 6352
 peach 3491
 pear 3491
 distribution, mandarin and tangerine 8064, 8067
 initiation, lettuce 1973
 movements, bean (*Phaseolus*) 5989
 optical properties, cucumber and gherkin 8659
 lettuce 1975
 measurement 438, 1675
 nitrogen nutrition, tomato 6908-6909
 pest incidence, *sahlbergella singularis*, cacao 2443
 photosynthesis
 apple 3413
 bean (*Phaseolus*) 2025, 2793
 celery 2901
 greenhouse crops 5683
 potassium nutrition, cucumber and gherkin 5958
 rhubarb 2901
 tree fruits 7325
 pigment stability, cucumber and gherkin 2776
 pigments
 biosynthesis, rose 1394
 degradation, cucumber and gherkin 4459
 plant
 composition
 coffee 1588
 oil palm, annual report, Nigeria 9181
 spinach 2903
 tomato 6064
 weight, lettuce 8611

Light contd.

- intensity contd.
 potassium nutrition, tomato 6908-6909
 pruning and training
 apple 7360
 grapevine 5834
 respiration
 chrysanthemum 7860
 greenhouse crops 5683
 peach 3491
 pear 3491
 responses
 chrysanthemum, annual report, USA 1315
 varietal differences, cucumber and gherkin 8660
 transpiration, bean (*Phaseolus*) 2793
 water relations
 apple 8397
 sugar cane 4102
 interaction
 ethylene, chlorophyll biosynthesis, cucumber and gherkin 2779
 growth substances
 bean (*Phaseolus*) 195
 coleus 1375
 morning glory 1339
 tomato, annual report, Irish Republic 5150
 temperature
 growth, bean (*Phaseolus*) 7716
 photosynthesis, bean (*Phaseolus*) 7716
 tomato 2132
 interception
 high density planting, fruit trees and plants 1710
 plant stands 4
 review, apple 8357
 rootstock-scion relationships, apple 7356
 tree canopies, peach, annual report, Australia 450
 juvenility, cauliflower and broccoli 7644
 leaf, senescence, bean (*Phaseolus*) 4482
 lipids, content, watermelon 7690
 nitrogen
 metabolism
 spinach 2748
 spinach beet 2748
 nucleic acids, metabolism, pea 6012
 pigments
 biosynthesis
 cabbage 3668
 celosia 6994
 metabolism, radish 2766
 plant, responses, book 7305
 quality, spectral, latitude 5678
 red
 anthocyanins, biosynthesis, cabbage 8630
 cell, division, pea 4508
 chlorophyll
 biosynthesis
 bean (*Phaseolus*) 4505, 7715
 pea 4505, 6865
 chloroplast, development, pea 6865
 cold resistance, weigela, pyracantha 5485
 enzyme activity
 bean (*Vicia*) 8712
 mustard 7980
 ethylene production, inhibition, pea 2059
 flowering date, lily 3870, 4658
 geotropic responses, pea 2059
 growth, lily 3870, 4658
 growth substances, endogenous, pea 4514
 leaf
 development, bean (*Phaseolus*) 3716
 growth, pea 3738
 movements, *Albizia* spp. 5265
 photosynthesis, vegetables 7806
 pigment stability, cucumber and gherkin 2776
 responses, varietal differences, cucumber and gherkin 8660
 seed
 germination
 lettuce 136, 1976
 Nemophila spp. 3861

Light *contd.*red *contd.*

sugars, metabolism, pea 2058

reflection

leaf

diseases, annual report, USA 599

measurement techniques 6485

squash, annual report, USA 600

sources 3313

comparative trials, testing equipment 3304

photosynthesis 3314

stomata, movements, tradescantia 5417

sugars, content, black currant 4310

sunlight

absorption, intercropping, sugar cane 2467

flowering, date, grapevine 586

fluorescent-incandescent lamps,

compared, testing equipment 3304

fruiting, precocity, cucumber and

gherkin 1995

reflection, apple 2557

soil, temperature, intercropping, sugar cane 2467

supplementary

book 8307

capsicum 2096

cuttings, tea, annual report, Malawi 6455

equipment, ornamental plants 8841

flowering

alstroemeria 7875

ornamental plants 8841

flowering date

carnation 3839

chrysanthemum 3842

forcing, strawberry 5820

greenhouse crops 1334

growth

campanula 6160

carnation 3839

lettuce 1975

seedling raising

kohl-rabi 2880

tomato 2880, 6096

source

natural gas

greenhouse 2498

plant injury, greenhouse crops

2498

Streptocarpus spp., annual report, UK

3832

transmission

leaf

measurement techniques 6485

squash, annual report, USA 600

tree canopies, apple 7355

ultra-violet

alkaloids, content, medicinal plants 6288

filtered by, plastic 679

fruit

colour, tomato 8797

ripening, tomato 8797

pest resistance, grapevine 7577

reflection, flower, crucifers 1986

seed, treatment, alkaloids content,

medicinal plants 6288

water, movement, pea 3737

white, calcium, metabolism, bean

(Phaseolus) 7713

yellow, leaf, growth, pea 3738

Ligustrum spp.

alkaloids 4824

diseases, *Cercospora* spp. 6240

ethylene, concentration, flooding 3837

flooding, ethylene, concentration 3837

fluorine, toxicity, plant tolerance 7845

glycosides 4723

growing, in containers, weed control

8853

herbicides

application, mulches 8853

injury, dichlobenil 8853

nutrition, nitrogen, annual report, Irish

Republic 2909

propagation, cuttings, media 708

root

development, soil temperature 3925

growth, soil temperature 3925

Ligustrum spp. *contd.*

soil

temperature

root development 3925

root growth 3925

sulphur dioxide, injury, plant resistance 7845

Lilac, annual report, Canada 2910

Lilac diseases

mottle 5465

resistance, annual report, USA 1315

Lilac flower, cut, economics 4608

Lilac growth substances, retardants,

chlormequat 6212

Liliaceae, ornamental species, Denmark

3863

Lilium spp.

pollination, mechanism, carbohydrate

metabolism 2253

tulipoides 8908

L. tigrinum

flower

cation exchange capacity 7873

composition 7873

Lily

annual report

Austria 265

Netherlands 2219, 6127

USA 2152, 8834, 8839

breeding and selection 2952

annual report, Canada 8836

cytology 4661

meiosis 2948

dormancy 2949

dwarfing

growth substances 2251, 5430, 8896

ancymidol 4659

CHE-8913 2252

EL-531 2252

Phosfon 2252

photoperiodism 2252

enzyme activity

flower 3851

temperature 2250

flowering, date, growth substances 4659,

5431

fungicides, disease increase, benomyl

7903

growing

as an intercrop, *Strelitzia* spp. 8879

as pot plants 5430, 8896

in pots, fertilizers, application 3869

heat treatment

enzyme activity, flower 2250

fungus control, bulb 7902

nematode control, bulb 7902

herbicides, responses 8852

irrigation, fertilizer, application 3869

light

red

flowering date 3870, 4658

growth 3870, 4658

photoperiodism

dwarfing 2252

flowering 3870, 4658

growth 3870, 4658

light, sources, compared 3870, 4658

phytochrome

system

light, supplementary 4658

photoperiodism 4658

pollen

germination

carbon dioxide 1363

ethylene 1363

humidity 7010

studies 5432

tissue culture 292

pollen tube

growth

carbon dioxide 1363

ethylene 1363

structure 2951

pollination, artificial, seed production

2952

tissue culture

bulb scales 731

pollen 1363

shoot-tip 731

weed control 2247, 8852

yearbook, USA 5427-5428

Lily bulb

pre-cooling, root growth 5429

Lily bulb *contd.*

storage, rots 7903

treatment

fungicides 7902

heat 7902

temperature 3870

Lily diseases*Botryodiplodia theobromae* 1360*Botrytis elliptica*, Argentina 6181

brown ring formation 6180

brown ring virus 6179

vectors, control 2248-2249

Fusarium oxysporum, control 7902

latent virus, vectors, control 2248-2249

mosaic virus, vectors, control 2248-2249

Nectria radicola, control 7902*Penicillium corymbiferum*, fungicides,

resistant strains, benomyl 7903

P. spp., control 7903*Pythium* spp., control 7902

streak mottle 6180

tulip breaking 6180

Lily flower

bud initiation, growth substances, GA

1362

carbon dioxide, content, style cavity

1363

cut, fluorine injury, tap water 2913

drop, growth substances, GA 1362

number

growth substances

EL-531 5431

ethephon 5431

Lily growth substances

application, methods, ancymidol 4659

dwarfing 5431

aminozide 8896

ancymidol 1361, 2251, 4659

CHE-8913 2251-2252

chlormequat 1361, 2251, 5430, 8896

EL-531 2252

ethephon 1361

Phosfon 2252

Phosfon 2251

flower

drop, GA 1362

number

EL-531 5431

ethephon 5431

flower bud, initiation, GA 1362

flowering

date

ancymidol 4659

ethephon 5431

injury

ancymidol 2251

chlormequat 5430, 8842

leaf, size, GA 1362

responses, chlormequat 8842

Lily leaf, size, growth substances, GA

1362

Lily nutrition 1325

fertilizers

application

irrigation 3869

methods compared 3869

slow-release 3869

Lily-of-the-valley

glycosides

content

flower 7914

leaf 7914

seasonal variations 6189

stomata, number, taxonomy 6188

taxonomy, stomata, number 6188

Lily pests

aphids, virus, vectors, control 2248-2249

Pratylenchus penetrans, control 7902**Lily propagation**

bulb scales, tissue culture 731

shoot-tip culture 731

Lily root, growth, bulb pre-cooling 5429**Lily seed**

production, pollination, methods

compared 2952

sugars, content 8883

Lily varieties, pot plants 5430**Lime** (*Citrus*)

essential oil, composition 4023

harvesting, disorder incidence 4017

pollination 4008

Rangpur, as a rootstock, heat resistance

7141

Lime (*Citrus*) contd.

- as a rootstock
- citrus 5558
- review 3102
- disease resistance, grapefruit 9092
- storage
- dips, disorder control, stylar-end breakdown, 2,4-D 4017
- disorder incidence 4017
- weed control 6325

Lime (*Citrus*) diseases

- control, review 5540
- exocortis 8076
- Fusarium* spp. 5563
- greening, control 9090

Lime (*Citrus*) disorders

- oleocellosis 4017
- stylar-end breakdown 4017

Lime (*Citrus*) flower, sex

- 4008

Lime (*Citrus*) fruit

- ascorbic acid
- content
- fruit size 8101
- seasonal variations 8101

Lime (*Citrus*) fruit, hydrocarbons,

- determination 1498

Lime (*Citrus*) fruit

- injury, resistance 9103
- irradiation, gamma rays, mechanical injury resistance 9103
- set, growth substances 1499
- size, ascorbic acid, content 8101
- wax coatings, mechanical injury resistance 9103

Lime (*Citrus*) growth substances

- fruit, quality, GA, annual report, USA 2375
- fruit set 1499

Limonium spp.

- flower, flavonoids, content 723
- flowering
- date
- photoperiodism 6996
- temperature 6996
- photoperiodism, flowering date 6996
- temperature, flowering date 6996

Linaria spp., choline, determination

- 2933

Lindera erythrocarpa, ketones,

- determination 4769

L. spp.

- essential oil, chemotaxonomy 5498
- taxonomy, essential oil 5498

Lipaphis erysimi

- control, mustard pests 7971
- mustard pests 330
- radish pests 1180

Liquidambar styraciflua

- ethylene, treatment 2979
- staking 2979
- trunk
- girth 2979
- stress distribution 8939
- wind, damage 2979

Liquorice

- dye plants 3943
- glycosides 7108
- growing
- on terraces 5524
- USSR 4768
- medicinal properties 6299
- organic acids 7108
- determination 8024
- products and by-products, Organit, planting media 6985

Liquorice propagation, cuttings, root

- 779

Liquorice root

- composition, formononetin 350
- glycyrrhizin, content 779
- regeneration, soil, cultivation depth 5524

Liquorice seed

- germination, temperature 1457
- sowing, depth 1457
- treatment
- sulphuric acid 1457
- X-rays 7109

Liquorice soil

- cultivation
- depth 5524
- root regeneration 5524

Liriodendron spp., organic acids, content,

- seasonal variations 4163

L. tulipifera

- 4724

Liriomyza langei

- garlic pests 5298
- onion pests 5298

L. munda

- control, chrysanthemum pests 6973
- tomato pests 1288, 4576-4577

L. trifolii, watermelon pests, annual report,

- USA 4368

Liriope spp., taxonomy, cytotoxonomy

- 3905

Listronotus oregonensis, carrot pests, annual

- report, Canada 2734

Litchi

- growing, USA 1531
- nematicides
- application
- methods compared
- Ciba 14421 6373
- DBCP 6373
- Mocap 6373
- organic acids, biosynthesis, fruit, *Aspergillus varicolor* 8110

Litchi diseases

- Aspergillus varicolor*, host organic acids, biosynthesis 8110
- Cephaleuros virescens* 4818

Litchi growth substances

- cuttings
- rooting
- IBA 814
- NAA 814

Litchi pests

- Aceria litchi*, annual report, India 4024
- Anoplophora macularia* 373
- Hemicriconomoides mangiferae*, soil treatment 6373
- Xiphinema brevicolle*, soil treatment 6373

Litchi propagation

- air-layering, nematode survival 6373
- cuttings
- growth substances IBA 814
- NAA 814
- under mist 5677

Litchi varieties

- annual report, USA 2375
- Hawaii 5585

Lithium, leaf analysis, citrus

- 1484

Lithocolletis blancardella

- apple pests 5738
- population studies, apple pests 956

L. purifoliella, apple pests

- 4217

Litsea spp., alkaloids, content

- 2362

L. turfosa

- alkaloids 9040
- phenolic compounds 9040

Liverworts

- control 13
- container-grown plants, annual report, UK 8838
- medicinal properties, survey 775

Lixophaga diatraeae, parasite of, *Diatraea*

- saccharalis*, sugar cane 2469

L. spheophori, parasite of, *Rhabdoscelus*

- obscurus*, sugar cane 5653

Lobelia fulgens, flower, cut, production

- 2215

L. inflata

- growing, as a medicinal plant 8029
- as medicinal plants 8029

L. nicotianaefolia, alkaloids, content

- 2332

Lobelia seed

- sowing, direct, in pots, pelleted 2165
- treatment, pelleted 2165

Lobelia spp., alkaloids

- 6303

Lobesia botrana

- grapevine pests 4351
- annual report, Cyprus 3560

Loganberry

- economics
- EEC 3343
- UK 3343
- production and trade
- EEC 3343
- UK 3343

Loganberry diseases, *Agrobacterium*

- tumefaciens*, annual report, UK 7489

Lolium multiflorum, overseeding, lawns and

- sports turf 2264

L. perenne

- lawns and sports turf
- UK 7917
- Yugoslavia 7915

Lolium contd.**L. spp.**

- lawns 2967
- lawns and sports turf
- irrigation, requirements 8915
- seed, sowing, methods, tillering 6192
- tillering, seed sowing, methods 6192
- tree root competition 303
- variety trials 7021
- weed incidence 8915
- orchard tracks 3890
- roadsides, establishment 3888
- Longan, growing, USA 1531
- Longidorus elongatus*, hop pests, annual report, German Federal Republic 7064
- L. martini*, vectors, ringspot, mulberry pests 8451
- Longiunguis sacchari*, aerial spraying, sugar cane pests 8235
- Lonicera japonica*
- shoot
- growth 5483
- morphology 5483

L. spp.

- boron, pollen germination 3000
- edible fruits, Siberia 1933
- fruit
- catechins, content 1933
- rutins, content 1933
- growing, USSR 4299
- growth studies 8964
- growth substances
- interaction, applied, chlormequat, and endogenous 8965
- responses, chlormequat 8965
- pollen, germination, boron nutrition 3000
- root, growth, development, soil, temperature 3925
- soil, temperature, root, development, growth 3925

Lophanthus anisatus, essential oil, content

- 7983

Lophophora spp., alkaloids

- 3080

Loquat, growing, India

- 4819

Loquat diseases

- Aspergillus niger* 4820
- Pseudomonas eriobotryae* 5587
- Spilocaea eriobotryae* 815

Loquat propagation

- air-layering 5586
- budding, shield 5586
- grafting, veneer 5586

Lordops aurosa, cacao pests

- 3185

Lotus spp., roadsides, establishment

- 3888

Loxopterygium huasango, gum

- 4781

Lucuma mammosa

- fruit
- firmness 3174
- ripening 3174

L. nervosa, fruit, aroma

- 7171

Luffa cylindrica

- enzyme activity
- fruit, soil salinity 2838
- leaf, soil salinity 2838
- nucleic acids, biosynthesis, soil salinity 2838
- nutrient, absorption, soil, salinity 3773
- soil
- salinity
- enzyme activity 2838
- nucleic acids, biosynthesis 2838
- nutrients, absorption 3773
- plant, tolerance 3773

L. spp.

- chlorophyll, degradation, cucurbit mosaic virus 1259
- diseases
- cucumber mosaic, plant metabolism 3684
- cucurbit mosaic virus, chlorophyll, degradation 1259
- mosaic virus 1189
- Sphaerotheca humuli* 6823
- photosynthesis, diseased plants 3684
- pollen
- morphology 7694
- physiology 7694
- respiration, diseased plants 3684
- Lunar materials, nutrient absorption, vegetables 4380
- Lunaria* spp., alkaloids, structure, seed 1354-1355

- Lupin**, breeding and selection, annual report, Canada 2910
- Lycopersicon cheesmanii***, pigments, biosynthesis 257
- L. spp.***, diseases, *Corynebacterium michiganense*, resistance 2872
- Lycoriella auripila***
insecticides, application, methods compared, mushroom pests 4602
mushroom pests 7838
- Lyda nemoralis***, apricot pests 63
- Lygus lineolaris***
annual report, Canada 2515
peach pests, annual report, USA 4945
strawberry pests 1887
annual report, Canada 2669
- L. pabulinus***
apple pests 478
annual report, German Federal Republic 6506
- L. rugulipennis***, vegetables, pests 4429
- Lymaea* spp.**, parasite of, *Tapajosa rubromarginata*, sugar cane 5655
- Lyonetia clerkella***, control, peach pests 7448
- Macadamia**
bibliography 4821
climate, requirements 5590
grading 8111
growing, South Africa 1516
harvesting 8111
processing 8111
report, USA 6324
symposium 7164
temperature, sums 5590
yield, estimation, tree age 4822
- Macadamia diseases**
Botrytis spp. 375
Phytophthora nicotianae 2418
- Macadamia disorders**, chlorosis, phosphorus nutrition 6374
- Macadamia nut**
drying 8111
shelling 8111
- Macadamia nutrition**
iron, chlorosis, phosphorus nutrition 6374
phosphorus, iron deficiency 6374
- Macadamia propagation**
cuttings 1517
grafting 5589
review 374
- Macadamia spp.***, edible fruits 1516
- Macadamia varieties** 4822
Hawaii 5588
- Maenellicoccus hirsutus***, host reactions, mulberry pests 5026
- Macropes excavatus***, sugar cane pests 7247
- Macrophoma dalmatica***, olive diseases 3166
- M. spp.***
apple diseases 2577
cacao diseases 4845
- Macrophomia phaseoli***
bean (*Phaseolus*) diseases 5250
marrow diseases 4456
seed-borne, bean (*Phaseolus*) diseases 5982
- M. phaseolina***, tulip diseases 3317
- Macroposthonia xenoplax***, grapevine pests 1919
- Macrosiphum euphorbiae***
biological control, cucumber and gherkin pests 3685
vectors
subterranean clover stunt, yellow mosaic, legumes 6846
virus
bean (*Vicia*) pests 6846
pea pests 6846
- M. fragariae***, blackberry pests 5079
- M. funestum***, blackberry pests 5079
- M. pisi***
host nutrition, foliar, pea pests 1232
predators, pea pests 1232
- Macrosteles sexnotatus***
mycoplasma
vectors
hyacinth 7007
hyacinth pests 290
mycoplasma, vectors, gladiolus pests 290
- Madhuca indica***, glycosides, content 2341
- Maccolaspis ornata***, cacao pests 3185
- Magnesium**
absorption
aluminium nutrition, apple 5730
fruit, set, mandarin and tangerine 3111
orange 6342–6343
orange nutrition 7135
peat pH, chrysanthemum 6145
- application**
foliar, orange nutrition 1485
methods compared, fruit trees and plants 866
- cell wall, composition, pea** 8730
- content**
aluminium nutrition, bean (*Phaseolus*) 5974
copper nutrition, coffee 393
disease incidence, grapevine 1913
flower, peach 6631
- fruit**
peach 6631
tomato grafted on potato 8795–8796
- irradiation resistance, pea** 1241
- leaf**
apple 6553
calcium nutrition, mandarin and tangerine 8071
drought
sugar cane 2474, 8200
tomato 2474
flooding
sugar cane 2474, 8200
tomato 2474
potassium, deficiency, mandarin and tangerine 3117
rootstocks, plum 2657
seasonal variations, apple 6554
nitrogen nutrition, orange 1478
- plant**
fruiting, fruit trees and plants 5705
potassium nutrition, pea 5243
vegetables 8702
potassium nutrition, orange 1478
root, nitrogen nutrition, tea 8270
- shoot**
root temperature, chrysanthemum 8863
seasonal variations, apple 6554
- tuber, tomato grafted on potato** 8795–8796
- deficiency**
apple 6558
chrysanthemum nutrition 1325
citrus nutrition, annual report, USA 2375
coffee 9166
grapevine, annual report, USA 1440, 5078
- leaf analysis, mangosteen nutrition** 1667
- manganese nutrition, banana, annual report, Australia** 5600
- orange nutrition** 1485
- passion fruit nutrition** 1524
- plant sensitivity, vegetables** 5162
- symptoms**
coffee 3198
tomato 4567
tulip, annual report, Netherlands 6962
- determination**
atomic absorption spectrophotometry 8290
methods 8289
disease incidence
marigold 2205, 5412
stock 2205, 5412
tomato 2205, 5412
disease resistance, begonia, annual report, Belgium 8835
disorder incidence, stalk desiccation, grapevine 5126
enzymes, biosynthesis, cucumber and gherkin 5963
- fruit**
composition
cherry 69
orange 370, 1478
- leaf analysis**
apple 3402, 7368
banana 9131
carrot 6109
citrus 1484
- Magnesium contd.**
leaf analysis contd.
coffee 1570
oil palm 7214
orange nutrition 1478, 1485
peach nutrition 1018
petiole analysis compared, grapevine 8551
sugar cane 412
nitrogen nutrition, viburnum, annual report, USA 6129
petiole analysis, leaf analysis compared, grapevine 8551
phosphorus nutrition, mandarin and tangerine 9083
plant analysis, sugar cane 6437
potassium nutrition, mandarin and tangerine 9083
requirements, vegetables 4381
soil analysis, soil pH, cacao 7180
- sources**
cauliflower and broccoli, annual report, UK 4366
compared
citrus, annual report, USA 8051
mandarin and tangerine 7137
orange 1485
toxicity, cucumber and gherkin nutrition 1997
translocation
bean (*Phaseolus*) 2028
temperature, bean (*Phaseolus*) 2028
yield reduction, tea 9277
- Magnolia**
nursery management, overwintering 5467
organic acids, content, seasonal variations 4163
planting, WANE system, roadside plants 3908
respiration, wind 5254
wind, respiration 5254
- Magnolia diseases**, *Cylindrocladium scoparium* 7039
- Magnolia flower**
anatomy, integuments 7941
development, integuments 7941
- Magnolia propagation**
cuttings
annual report, Irish Republic 2909
frame 6134
overwintering 4694
shoot, age 5466
treatment
growth substances
Chloromone 5466
2,4-D 5466
IBA 5466
- Magnolia root**
acuminatin, content 5468
lignans, content 5468
- Mahaleb propagation**
cuttings
root, treatment, growth substances, IBA 8323
treatment, growth substances, IBA 8323
- Mahonia spp.**
leaf
anthocyanins, content, respiration 8944
colour, respiration 8944
respiration, leaf, colour 8944
- Malawi, bean (*Phaseolus*)**, growing 8673
- Malaysia, rubber, growing** 8176
- Mallotus philippinensis***, flavonoids 6245
- Malpighia spp.***, fruit, composition, ascorbic acid 1050
- Malus mandshurica*** 4175
taxonomy 5711
- M. spp.***
annual report, UK 2155
breeding and selection
disease tolerance, *Podosphaera leucotricha* 2539
fruit, size 2539
pest resistance, *Dysaphis* spp. 2539
diseases, *Venturia inaequalis*, annual report, UK 6128
enzyme activity, determination 1063
ethylene, concentration, flooding 3837
flooding, ethylene, concentration 3837
frost, resistance 4187

Malus spp. contd.

- growth substances, internode, length, brassins 4726
- juvency 4725
- pollen, production, for bees 3930
- as a pollinator, apple, annual report, UK 903
- propagation, cuttings, treatment, growth substances 3931
- virus-tested plants, EMLA scheme 7320
- as windbreaks 3930

M. spp., ornamental

- diseases
 - chlorotic leaf spot 7058
 - decline 7058
 - platycarpa scaly bark 7058
 - Spy 227 epinasty 7058
- varieties, virus tolerance 7058

M. spp., ornamental, propagation, cuttings, annual report, Canada 8836**Malvaviscus arboreus**

- flower, bud initiation 5484
- growing, as pot plants 5484
- photoperiodism, flower bud, initiation 5484
- temperature, flower bud, initiation 5484

Mamestra brassicae, cabbage pests 5195**Mammea americana**

- coumarins 4909-4910
- fruit
 - firmness 3174
 - ripening 3174
- medicinal properties 4909
- plant, composition 4909-4910

Mammillaria spp.

- flower, bud initiation, temperature, photoperiodism 6200
- photoperiodism, temperature, flower bud, initiation 6200

Mandarin and tangerine

- altitudes, fruit, quality 3107
- amino acids
 - content
 - fruit 8086
 - drought 8093
 - leaf 8086
- biennial bearing
 - fruit, thinning, growth substances, NAA 801
 - growth substances 802
 - leaf, manganese, content 7139
 - pruning and training 1477
- breeding and selection 3099
- interspecific hybridization 5545
- calcium, content, leaf, plant nutrition 9083
- carbohydrates
 - content
 - disease resistance 3131
 - frost resistance 3131
 - fruit 9108
 - leaf 9108
 - metabolism 2398
 - translocation 2398
- chlorophyll, content, plant nutrition 9100
- drought, fruit, composition 8093
- flowering
 - nitrogen nutrition 8070
 - soil moisture 8070
- frost
 - protection
 - covers, plastic 7130
 - temperature data 6335
 - resistance 3101
 - carbohydrates, content 3131
 - nitrogen, content 3131
 - polyploids 7129
- fungicides
- residues
 - fruit
 - 2-aminobutane, annual report, USA 2375
 - biphenyl 9107
 - phenylphenol 9107
- growing
 - Mozambique 360
 - tunnels, plastic, frost protection 7130
- growth-yield, relationships 7136
- harvesting
 - method, fruit, storage quality 5573
 - time of, fruit composition 6366

Mandarin and tangerine contd.

- high density planting, light intensity 8064
- hybrids
 - fruit, ascorbic acid 3158
 - interspecific 5545
- insecticides
 - plant composition
 - dimethoate 3138
 - formothion 3138
 - tetradifon 3138
 - plant metabolism
 - demeton-methyl 3138
 - dicofof 3138
 - dimethoate 3138
 - efirsulphonate 3138
 - formothion 3138
 - tetradifon 3138
- residues
 - arsenic 3329
 - fruit
 - demeton-methyl 3138
 - dicofof 3138
 - dimethoate 3138
 - efirsulphonate 3138
 - formothion 3138
 - tetradifon 3138
- irrigation, fruit, juice composition 3155
- light
 - intensity
 - fruit, distribution 8064, 8067
 - leaf
 - chlorophyll, content 6352
 - distribution 8064, 8067
 - photosynthesis 7325
- magnesium
 - content
 - leaf
 - calcium nutrition 8071
 - plant nutrition 9083
- manganese, content, leaf, biennial bearing 7139
- mulching, peat 3991
- nitrogen
 - content
 - disease resistance 3131
 - frost resistance 3131
 - leaf, plant nutrition 9083
 - nutrient absorption, fruit, set 3111
 - organic acids, content, fruit, drought 8093
 - packing, fruit weight loss 7151
- phosphorus
 - content
 - leaf 7133
 - plant nutrition 9083
- photosynthates
 - translocation 5567
 - fruiting 5568
- photosynthesis 7325
 - leaf age 5568
 - leaf nitrogen content 5568
 - plant nutrition 9100
- planting
 - high density, light intensity 8064
 - spacing, light intensity 8064
- polyembryony 9079
- potassium, content, leaf, plant nutrition 9083
- products and by-products
 - canned segments 3151
 - juice, composition 3155
- pruning and training
 - biennial bearing 1477
 - fruit, distribution 8067
 - leaf, distribution 8067
- respiration
 - fruit
 - growth substances, ethephon 3149
 - storage, temperature 7153
- ringing, fruit, size 803
- as a rootstock
 - grapefruit 6332
 - orange 795
- seedling, identification, leaf, shape 7124
- sodium, content, leaf, plant nutrition 9083
- statistical design of trials 361
- storage
 - cold, temperature 7153
 - controlled atmosphere 5002
 - rind curing 9105
 - temperature, fruit, composition 5573

Mandarin and tangerine contd.

- sugars, content, fruit, drought 8093
- temperature, leaf, chlorophyll, content 6352
- transport, pre-cooling, temperature, container- 4016
- tree
 - crown foliar density
 - light intensity 8064
 - pruning and training 8067
 - crown fruit distribution
 - light intensity 8064
 - pruning and training 8067
- Mandarin and tangerine diseases**
 - Alternaria citri*
 - canned fruit 3151
 - fruit storage 5574
 - Cladosporium* spp., canned fruit 3151
 - collar rot, cause unknown 362
 - Colletotrichum gloeosporioides* 4800
 - Deuterophoma tracheiphila* 365
 - variety resistance 3131
 - Diaporthe citri* 3128
 - Diplodia natalensis* 4810
 - exocortis virus 2386
 - Penicillium digitatum* 4810
 - P. spp.*, fruit storage 7153
 - satsuma dwarf, Turkey 8077
 - Xanthomonas citri*, pathogen survival 5561
- Mandarin and tangerine disorders**
 - stem-end rot, fruit storage 7153
 - water spot 804
- Mandarin and tangerine fruit**
 - acidity
 - determination 6365
 - orchard location, altitude 5577
 - amino acids 7157
 - ascorbic acid 3158
 - content
 - phosphorus nutrition 8072
 - plant nutrition 7158
 - storage 5573, 7153
 - carbohydrates, accumulation, growth substances 2398
 - colour
 - ethylene, treatment 2410
 - growth substances 3149
 - ethephon 2407, 2410
 - GA 804
 - nitrogen nutrition 8070
 - soil moisture 8070
 - composition 3155, 5575, 7157
 - altitude 3107
 - drought 8093
 - fruit ripening 8093
 - growth substances 802
 - harvesting date 6366
 - nitrogen nutrition 8070
 - plant nutrition, soil management 7158
 - rootstocks 4788, 8062
 - soil, moisture 8070
- degreening
 - disease incidence
 - Diplodia natalensis* 4810
 - Penicillium digitatum* 4810
 - ethylene 4810
- distribution
 - light intensity 8064
 - pruning and training 8067
- injury, resistance 9103
- irradiation, gamma rays, mechanical injury resistance 9103
- loosening, growth substances, ethephon 2407
- nutrients, content, fruit, set 3111
- organic acids 7157
 - content, phosphorus nutrition 8072
- peel, composition, annual report, USA 8051
- pigment accumulation, growth substances, ethephon 2410
- pigments, metabolism 4005
- quality
 - altitude 3107
 - evaluation 6365
 - growth substances 6358
 - orchard location, altitude 5577
 - rind curing, weight loss 9105
 - ripening, amino acids, content 2413
 - size
 - growth substances 802
 - GA 803

Mandarin and tangerine fruit *contd.*

- size *contd.*
 - phosphorus nutrition 8072
 - plant nutrition, soil management 7158
 - storage quality 5573
- sugars 7157
 - content 6365
 - phosphorus nutrition 8071
 - plant nutrition 7158
 - storage 7153
- thinning
 - growth substances 3145, 6358
 - NAA 801
- wax coatings, mechanical injury resistance 9103
- weight
 - loss, handling 7151
 - rind curing 9105
 - storage 9105

Mandarin and tangerine growth substances

- biennial bearing 802
- carbohydrates
 - accumulation
 - chlormequat 2398
 - GA 2398
 - kinetin 2398
- fruit
 - colour
 - ethephon 2407, 3149
 - GA 804
 - composition
 - NAA 802
 - TIBA 802
 - disorders, GA 804
 - loosening, ethephon 2407
 - pigment accumulation, ethephon 2410
 - quality, NAA 6358
 - size
 - GA 803
 - NAA 802
 - TIBA 802
 - thinning
 - NAA 801, 3145, 6358
 - TH 656 3145
- respiration, fruit, ethephon 3149

Mandarin and tangerine leaf

- age
 - manganese content 9088
 - manganese deficiency 9088
- ascorbic acid 3158
- chlorophyll, content 6352
- composition, mineral elements 1484
- distribution
 - light intensity 8064
 - pruning and training 8067
- manganese, content 7139
- nutrients
 - content
 - fruit, set 3111
 - rootstocks 8062
- temperature, photosynthesis 7325

Mandarin and tangerine nutrition

- boron 6344
 - absorption, calcium nutrition 6344
 - determination, methods 3120
- fruit
 - composition 7158
 - size 7158
- calcium 7158, 8071
 - boron absorption 6344
 - deficiency 8071
 - phosphorus nutrition 9083
 - photosynthesis 9100
 - potassium nutrition 9083
 - sources, compared 7137
- FYM, photosynthesis 9100
- general, chlorophyll, content 9100
- green manures 3991, 7158
- magnesium
 - phosphorus nutrition 9083
 - potassium nutrition 9083
 - sources, compared 7137
- manganese
 - content, leaf 7139
 - deficiency 9088
 - fruit
 - composition 7158
 - size 7158
 - leaf analysis 9088
- nitrogen
 - absorption 9084–9085
 - application, time 8070, 9084–9085
 - composition 8070

Mandarin and tangerine nutrition *contd.*

- nitrogen *contd.*
 - flowering 8070
 - fruit colour 8070
 - leaf, chlorophyll, content 6352
 - phosphorus nutrition 9083
 - photosynthesis 9100
 - potassium nutrition 9083
 - sources, compared 7134
 - translocation 9084–9085
- NPK 7158
 - leaf analysis 9083
 - photosynthesis 9100
 - soil pH 9083
- phosphorus 8071
 - deficiency 8071
 - fruit
 - ascorbic acid, content 8072
 - organic acids, content 8072
 - size 8072
 - leaf analysis 7133
 - potassium nutrition 9083
- potassium 3116–3117
 - deficiency 3117
 - deficiency symptoms 7136
 - phosphorus nutrition 9083
 - plant analysis 7136
- sewage sludge, photosynthesis 9100
- Mandarin and tangerine pests**
 - Anoplophora* spp., rootstock resistance 7128
 - Aonidiella aurantii*
 - population studies, damage 2396
 - resistance 3134
 - mites, biological control 366
 - Saissetia oleae* 9098
- Mandarin and tangerine root**
 - development, soil, management 3991
 - growth, biennial bearing 7139
 - nutrients, content, fruit, set 3111
- Mandarin and tangerine rootstocks**
 - comparative trials
 - Citrus junos* 8062
 - Poncirus trifoliata* 8062
 - pest resistance 7128
 - Poncirus trifoliata* 3101, 4788
 - scion relationships
 - frost resistance 3101
 - fruit
 - characters. 7128
 - composition 4788, 8062
 - leaf
 - composition 1484
 - nutrients, content 8062
 - yuzu 7128
- Mandarin and tangerine shoot, nutrients,**
 - content, fruit, set 3111
- Mandarin and tangerine soil**
 - management
 - fruit, juice composition 3155
 - methods compared 3991
 - fruit quality 7158
 - moisture
 - flowering 8070
 - fruit quality 8070
 - requirements 8068
- Mandarin and tangerine varieties**
 - comparative trials, annual report, Burundi 4786
 - disease resistance, *Deuterophoma tracheiphila* 3131
 - frost, resistance, leaf, composition 3131
- Mandragora** spp., alkaloids 9041
- Manganese**
 - absorption
 - orange 6342–6343
 - phosphorus nutrition, avocado 8055
 - soil salinity
 - squash 6912
 - tomato 6912
 - application
 - foliar
 - almond 8333
 - capsicum 6892–6893
 - disease incidence, grapevine 7568
 - grapevine 7568
 - orange 1482, 4791, 6342–6343
 - ornamental flowers 1343
 - precipitants, orange 9086
 - residues, orange 9086
 - strawberry 5816
 - surfactants, vegetables 1136

Manganese *contd.*

- availability
 - coffee nutrition 7191
 - nitrogen nutrition
 - chrysanthemum 8589
 - vegetables 8589
- cold, resistance, lemon nutrition 1483
- content
 - calcium nutrition, orange 1478
 - flower, peach 6631
 - fruit, peach 6631
 - leaf
 - apple 6553
 - biennial bearing, mandarin and tangerine 7139
 - iron nutrition, tomato 7789
 - mandarin and tangerine 7139
 - nitrogen nutrition, sources, peach 3470
 - rootstocks, plum 2657
 - soil fumigation, avocado 8055
 - soil steaming, avocado 8055
 - soil sterilization, tomato 240
 - sugar cane, annual report, South Africa 7230
 - varietal differences, apple 6554
 - magnesium nutrition, orange 1478
 - nitrogen nutrition, tea 6457
 - plant
 - nitrogen nutrition, tomato 4563
 - soil steaming, vegetables 8606
 - root, nitrogen nutrition, tea 8270
 - seasonal variations, hop 344
 - shoot
 - root temperature, chrysanthemum 8863
 - varietal differences, apple 6554
- deficiency 3299
 - calcareous soils, iron, sources, citrus nutrition 1480
 - coffee 9166
 - cucumber and gherkin 7683
 - diagnosis, enzyme activity, vegetables 1145
 - enzyme activity, sugar cane 1632
 - lettuce, annual report, Netherlands 1135
 - mandarin and tangerine 9088
 - radish, annual report, UK 8583
 - symptoms, cauliflower and broccoli nutrition 1983
- determination, atomic absorption spectrophotometry 8290
- enzyme activity
 - grapevine 5138
 - leaf, grapevine 1111
- enzymes, biosynthesis, cucumber and gherkin 5963
- flower, formation, ornamental flowers 1343
- flowering, autumn, lemon nutrition 1483
- fruit
 - composition, strawberry 5817
 - quality, strawberry 5817
 - composition
 - black currant 8486
 - mandarin and tangerine 7158
 - peel thickness, apple 6559
 - quality, juice content, orange 6342–6343
 - size
 - black currant 8486
 - mandarin and tangerine 7158
- iron imbalance, apple 4203
- leaf
 - absorption, surfactants, vegetables 1136
 - composition, apple 4977
 - potassium content, orange 9087
- leaf analysis
 - apple 3402
 - citrus 1484
 - cucumber and gherkin 7683
 - mandarin and tangerine 9088
 - oil palm 7214
 - sugar cane 412
- nitrogen, content, orange nutrition 1481
- photosynthesis, grapevine 1111
- plant
 - anatomy, grapevine nutrition 5105
 - composition, amino acids, pea 5284
 - plant analysis, sugar cane 6437
 - respiration, grapevine 5138

Manganese contd.

rootstock production, pear 5788
seed, production, ornamental flowers 1343

sources

chrysanthemum 8589
vegetables 8589

toxicity

banana, annual report, Australia 5600
calcium nutrition, pear 3492
chrysanthemum nutrition 1325
coffee nutrition 7191
cucumber and gherkin 7683
holly 4691, 6216
nitrogen nutrition
 chrysanthemum 8589
 vegetables 8589
pepper, black 4735
soil, steaming, melon (cantaloup and musk) nutrition 1998
water relations, melon (cantaloup and musk) 2773

Mango**air pollution**

injury
 acidic fumes 1592, 4064
 prevention 1592, 4064

annual report

Australia 1529
India 4034
Sri Lanka 3171
USA 1530

biennial bearing

growth substances
 endogenous 3241
 ethephon 7204
review 3238

shoot

carbohydrates, content 3239
nitrogen, content 3239

breeding and selection 3210

polyembryony 7202

carbohydrates, content, biennial bearing 3239**epiphytes, fungi, *Marasmius scandens* 823****flowering**

date, growth substances, ethephon 7204
growth substances
 aminozide 3236
 chlormequat 3236
 GA 3237

fungicides

injury
 benomyl 4873
 thiabendazole 4873

genetics 3210**growing**

India 3212
Philippines 2454, 3210
review 3211
USA 3213
Venezuela 8119

harvesting 3210**nitrogen, content, biennial bearing 3239****pollination 3210****pruning and training**

apical dominance 3234
axillary flowering 3235
biennial bearing 3235

ringing

apical dominance 3234
axillary flowering 3235

seedling, planting 7202**storage 3210****dips**

benomyl 4873
disease control 4873
 Colletotrichum gloeosporioides
 hot water 7205
 sodium diethyldithiocarbamate 7205
 zineb 7205
residues, ethylene dibromide 3243
rot control 4871
thiabendazole 4873
rots 4871

temperature**flower**

development 3230
malformation 3230

topworking 1591, 3216**Mango contd.**

transport 3210
vitamins, content 3339
wax coatings, fruit 8163
weed control 6325

Mango diseases

bacterial rot 4871
Colletotrichum gloeosporioides
 fruit storage 4873
 storage dips 7205, 8163
control, review 5540
Diplodia natalensis 3242
 fruit storage 4873
 storage dips 7205
fruit rots 4872
Fusarium moniliforme 4065
Marasmius spp. 823
Nodulisporium indicum 4869
Oidium spp. 7203
Physalospora rhodina 1593
Pseudomonas spp. 3232, 8162
soft brown rots, storage dips 8163
Verticillium dahliae 4066

Mango disorders

black tip 1592, 4064
bunchy top 2455
flower malformation 3228, 3230-3231, 4065
 pest incidence 3229

Mango flower

bud initiation, growth substances, ethephon 7204
development, temperature 3230
malformation 3228, 3231
 pest incidence, *Aceria mangiferae* 3229
 temperature 3230

Mango fruit

aroma 7171
 storage, dips 7205
ascorbic acid, content, irradiation, ionizing, post harvest 1595
colour
 irradiation, ionizing, post-harvest 1595
 storage, dips 7205
composition 5633
 storage, dips 7205
development 5633, 9178
 growth substances, endogenous 3241
firmness 3174
 storage, dips 7205
heat treatment, disease control 4873
irradiation
 gamma rays
 injury 8163
 post-harvest 1596
 storage life 2435, 3210
 ionizing, post-harvest, storage life 1595
maturity, standards 3210
pigments, content, irradiation, ionizing, post harvest 1595
proteins, content 4941
ripening 3210, 5633
 bio-chemistry 3174
 storage, dips 7205
set, growth substances, chlormequat 3236
treatment
 fungicides 7205
 hot water 7205

Mango growth substances

biennial bearing, ethephon 7204
endogenous
 fruit 3241
 apical dominance 3234
 leaf 3233
 seed 3241
 shoot 3233
 apical dominance 3234
flower bud, initiation, ethephon 7204
flowering
 chlormequat, aminozide 3236
 date, ethephon 7204
 GA 3237
fruit, set, chlormequat 3236
growth reduction, chlormequat, aminozide 3236
responses, chlormequat, review 8310

Mango leaf

area, measurement 1594
composition 5632
development, nutrients, content 5631
position, nutrients, content 5631

Mango nutrition

calcium, leaf analysis 5631
nitrogen, leaf analysis 5631
phosphorus, leaf analysis 5631
potassium, leaf analysis 5631

Mango pests

Aceria mangiferae 3228-3229, 4065
cryptophagid beetles 4065
Eupithecia spp. 4065
Frankliniella cubensis 4065
Lepidosaphes pallida, population studies 9179-9180

Mycetaspis personatus 399

 population studies 811

 nitidulid beetles 4065

Mango plant, development 1463**Mango propagation 3215**

air-layering 3227
 media 3218
 root initiation, biochemistry 3226
 treatment, growth substances 3226-3227

budding 3216

 methods compared 3218

cuttings 3216, 3220

 media 3220

 source plants

 ringing 3219

 treatment, growth substances 3219

grafting 3216

 methods compared 3221, 5629

 scions

 storage 3221

 treatment, leaf removal 3222

 side- 3222

 veneer 3221, 5629

under mist 5677

stool-bed formation 3217

Mango rootstocks 3215**comparative trials**

Indonesia 4868

polyembryonic 3224-3225

seedling 3224

-scion relationships 5630

selection methods 3223

Mango seed

development 9178

germination, media 840

storage, media 840

Mango shoot, exudate, composition 4870**Mango varieties 3240, 4874, 6409**

Anupan 3214

Au Rumani 839

Bride of Russia 3214

comparative trials

 annual report, USA 6383

 India 9177

 evaluation, Florida 5627

 fruit, ripening, time 3240

 India 3210, 5628

 Katiki Bihar 3214

 Keshar 3214

 Langra Dudhia 3214

 Neelum 3214

 Nisar Pasand 3214

 polyembryonic 7202

 processing 4875

Mangosteen disorders, little leaf, Fe/Zn

 imbalance 1667

Mangosteen nutrition

 iron, zinc imbalance 1667

 magnesium, deficiency, leaf analysis 1667

 zinc, iron imbalance 1667

Manila hemp, cover crops, *Pueraria javanica*

 2437

Manila hemp diseases, abaca mosaic virus,

 vectors 2437

Manila hemp pests

Aphis gossypii, virus vectors 2437

Rhopalosiphum maidis, virus vectors 2437

Maranta, growing, media, annual report,

 Belgium 8835

Maranta spp.

 acaricides, injury 7024

 disorders, leaf wilting, annual report, Belgium 5386

 pests, mites, control 7024

Marasmius oreades, incidence, lawns and

 sports turf, diseases 7929

M. palmivorus, control, oil palm diseases

 6384

- Marasmius** *contd.*
M. pernicius
 cacao diseases, annual report, Venezuela 6391
 hybrid resistance, cacao diseases 8132
 resistance, breeding and selection, cacao diseases, annual report, Trinidad and Tobago 9136
- M. scandens***, epiphyte, tropical fruit trees 823
- M. spp.***, tropical fruit trees, diseases 823
 Marcotting (see Air layering)
- Margaritoria hyalinata***, melon (cantaloup and musk) pests 5957
- M. nitidalis***, melon (cantaloup and musk) pests 5957
- Margyricarpus pinnatus***
 essential oil, composition 772
 flavonoids, content 772
- Marigold**
 flowering, growth substances 7879
 terpenes 4637
- Marigold diseases**, *Pythium myriotylum*, magnesium nutrition 2205, 5412
- Marigold flower**, bud initiation, growth substances 7879
- Marigold growth substances**
 flower bud, initiation, chlorflurenol 7879
 flowering, chlorflurenol 7879
 injury, chlorflurenol 7879
 shoot, growth, chlorflurenol 7879
- Marigold nutrition**, magnesium, disease incidence 2205, 5412
- Marjoram**
 growing
 media, compared 7605
 peat 7605
- Marliera* spp.**, growing, tropical America 377
- Marocentrus marginator***, parasite of, *Synanthedon tipuliformis*, black currant, red currant 6677
- Marrow**
 annual report
 Malawi 8580
 UK 3613
 enzymes, root 7692
 fungicides
 residues
 plant
 copper 1190
 streptomycin 1190
 growing
 under plastic 679
 protected cultivation 2159, 5159
 tunnels 1187
 growth, habit 1992
 herbicides, translocation, simazine, annual report, UK 5943
 mulching, plastic 156
 phosphorus, translocation, annual report, UK 5943
 potassium, translocation, annual report, UK 5943
- Marrow diseases**
 bean yellow mosaic, varietal resistance 7684
Corticium solani 4456
Drechslera halodes 4456
Erwinia carotovora 1190, 4454
Erysiphe cichoracearum, control 7385, 7686
Fusarium semitectum 4456
F. solani 4456
Macrophomina phaseoli 4456
Sphaerotheca fuliginea 6821
- Marrow flower**
 bud initiation
 growth substances
 ethephon 1201
 NAA 1201
 sex
 growth substances
 ethephon 1201, 5231
 NAA 1201
- Marrow fruit**, drop, nitrogen, toxicity 1203
- Marrow growth substances**
 flower
 sex
 ethephon 1201, 5231
 NAA 1201
- Marrow nutrition**
 FYM 156
- Marrow nutrition** *contd.*
 nitrogen, toxicity, fruit, drop 1203
- Marrow pests**, *Diitylenchus dipsaci* 3878
- Marrow seed**, production, growth substances, ethephon 5231
- Marrow soil**, cultivation 156
- Marrow varieties**
 comparative trials 1187
 disease resistance, bean yellow mosaic 7684
 growth habit 1992
- Marssonina juglandis***, varietal resistance, walnut diseases 5066
- M. potentillae***, strawberry diseases 4324
- Mascarena verschafteltii***, seed, germination 2415
- Matsumuratettix hiroglyphicus***, mycoplasma, vectors, white leaf, sugar cane 7243
- Medicago hispida***, as weeds, sugar cane 8204
- M. polymorpha***, as a cover crop, yerba maté 8118
- Medicinal plants**
 alkaloids
 content 2346
 survey, annual report, Sarawak 3933
 USSR 5516
 book 8970
 Bulgaria 6257
 chromosome numbers 1319
 economics, Czechoslovakia 7096
 growing, Czechoslovakia 3063, 7096
 Indonesia 1674
 Italy 6244
 medicinal properties 2347–2348
 survey 2349
 pests
 coleoptera, Bulgaria 1423
 Hemiptera 8003
 plant, composition 1444
 review 8004
 root, anatomy 3172
 seed, oil, biosynthesis 3336
 survey 775
 Argentina 2348
 India 5515
 West Pakistan 5514
 Ukraine 1456
 wild, Crimea 862
- Medicinal properties**
Bauhinia purpurea alba 2309
Benincasa hispida 5944
 citrus 808
Cyperus scariosus 1416
 medicinal plants 2347
Ocimum sanctum 3974
- Medlar**, growing 4607
- Medlar diseases**
Sclerotinia cydoniae 5800
S. fructicola 5800
S. fructigena 5800
S. laxa 5800
S. mespili 5800
- Megastigmus pistaciae***, pistachio diseases, annual report, Tunisia 4944
- Melaleuca alternifolia***, essential oil, Australia 4737
- M. cajuputi***, essential oil, composition 4741
- Melampsalta puer***
 fungal control, *Cordyceps heteropoda*, sugar cane 1638
 population survey, sugar cane pests 1638
 sugar cane pests, annual report, Australia 9219
- Melanagromyza phaseoli***, bean (*Phaseolus*) pests 167
- Melanaspis glomerata***, sugar cane pests 852
- Melanotus communis***, cabbage pests, annual report, USA 4367
- Melasphaerula* spp.**
 seed
 composition 2943
 oil 2943
- Melastomaceae**, edible fruits 4117
- Melia azedarach***
 glycosides 4771
 insecticidal properties 4751
 steroids 8031
- Melissa officinalis***
 flavonoids 7079
 organic acids 7079
- Meloidogyne arenaria***
Calathea makoyana, pests, annual report, Belgium 8835
 fruit trees and plants, pests 4931
 host reactions, capsicum pests 7762
 nutrient absorption, tomato pests 2878
- M. coffeicola***, coffee pests 1581
- M. exigua***
 Brazil, coffee pests 9168
 coffee pests 1581
- M. hapla***
 chinese gooseberry pests 4302
 growth substances, tomato pests 8785
 ornamental plants, pests, annual report, Belgium 8835
 rootstock resistance, rose pests 1393
 tomato pests 686
 annual report, Canada 5883
 vegetables
 pests 2761
 annual report, German Federal Republic 8579
- M. incognita***
Albizia spp., pests 751
 coffee pests 1581
 cucumber and gherkin pests 5351
 fruit trees and plants, pests 4931
 -fungus complex, tomato pests 2877
 host-pest relationships, tomato pests 3807
 host reactions, capsicum pests 7762
 incidence, Brazil, coffee pests 8152
 onion pests 3764
 parsley pests 3014
 peach pests 4258
 pepper, black, pests 7977
Pogostemon spp., pests 336
 population studies, tomato pests 6091
 resistance
 ornamental plants, pests 4615
 tomato pests 3807
 root composition, tomato pests 244
 rootstock resistance, peach pests 6624
 rubber pests 9215
 soil fumigation, grapevine pests 7573
 tea pests, annual report, India 1657
 tomato pests 685, 5351, 6090
 varietal resistance, tomato pests 1279
- M. javanica***
 disease relationships, almond pests 3367
 growth substances, tomato pests 8785
 host reactions, capsicum pests 7762
 nutrient absorption, tomato pests 2878
 onion pests 3764
 pepper, black, pests 7977
 resistance, ornamental plants, pests 4615
 soil fumigation, passion fruit pests 7168
 tomato pests 685–686
 annual report, Cyprus 3604
- M. spp.***
 bean (*Phaseolus*) pests, annual report, USA 8585
 chicory pests 1152
 control, capsicum pests 6975
 crop rotation, sugar cane 425
 leek pests 662
 ornamental plants, pests 4931
 resistance, tomato pests 2859
 soil fumigation
 cabbage pests 7801
 cucumber and gherkin pests 8783
 onion pests 7801
 tomato pests 7801, 8783
 sugar cane pests 7246
 tomato pests 1290, 8784
 vegetables
 annual report, USA 1935
 pests 4931
- M. thamesi***, onion pests 3764
- Melon (cantaloup and musk)**
 annual report
 Australia 1133
 USA 599–600, 1130, 4368
 breeding and selection
 annual report, USA 3616, 7601
 pest resistance, *Diabrotica* spp. 2001
 polyploid, induction 4442
 carbohydrates, content, flower bud, sex 8663
 cold, resistance, seed treatment 7677
 cucurbitacin, content, pest resistance 1194

Melon (cantaloup and musk) contd.

- dark treatment
 - fruit
 - composition 5962
 - flavour 5962
 - seedling development 5962
- enzyme activity
 - diseased plants 5220
 - inhibition, prenyl pyrophosphates 2030
- flowering
 - date
 - phosphorus nutrition 6816
 - potassium nutrition 6816
- fungicides
 - application, methods compared, dimethirimol 5221
 - injury
 - benomyl 5965
 - thiophanate 5965
 - plant responses
 - benomyl 5965
 - thiophanate 5965
 - thiophanate methyl 5965
- grading, mechanical 4913
- growing
 - under glass, pest control 3627
 - protected cultivation 2159, 5159
 - Tunisia 4369
 - tunnels, plastic 7679, 8646
- harvesting, book 5167
- herbicides, injury, dinoseb 624
- irrigation
 - drip 3624
 - flower, number 8664
 - furrow 4448
 - salinity problems 4376
 - soil chlorine content 4448
 - sprinkler 3624, 4376, 4448
 - trickle 4376, 4448
- mulching
 - paper 7679
 - plastic coated 6814
 - plastic 3680, 7679
 - weed control 7680-7681
- nitrogen
 - content, flower bud, sex 8663
 - metabolism, photoperiodism 8754
 - packing, book 5167
 - photoperiodism, nitrogen, metabolism 8754
- planting
 - direct sown 3680
 - spacing 1994
- pollination
 - artificial 4462
 - pollen mixtures 6833
- polyploid, induction 4442
- proteins, content, diseased plants 7685
- seedling
 - emergence, soil temperature 4447
 - raising, containers, types compared 7678
- soiless culture
 - media 6815
 - nutrient solution 6815
- storage, book 5167
- sunburn, injury, prevention, whitewashing fruit 622
- transport, book 5167
- water relations
 - nutrition 2773
 - plant, seed treatment 7677
 - weed control 623-624, 3679, 6778
 - methods compared 7680-7681

Melon (cantaloup and musk) diseases

- Alternaria brassicae* 2770
- control, cultural methods 2770
- varietal resistance 2770
- Colletotrichum lagenarium*
 - biological control 5952
 - host enzyme activity 5220
 - host proteins, content 7685
- Fusarium gibbosum*, incidence 8653
- F. oxysporum*
 - incidence 8653
- f. melonis* 5965
 - control, soil treatment 8654
 - host enzyme activity 5953
 - varietal resistance 6806
- F. solani*, incidence 8653
- mosaic 159
- Sphaerotheca fuliginea* 5221

Melon (cantaloup and musk) diseases contd.

- Verticillium* spp. annual report, Canada 2734

Melon (cantaloup and musk) flower

- number
- irrigation 8664
- plant nutrition 8664
- sex
 - carbohydrates 8663
 - climate 4462
 - growth substances
 - endogenous 1198
 - ethephon 1202, 5231
 - nitrogen 8663
 - nutrition 165
 - plant nutrition 8664
 - potassium 8663
- sex expression, growth substances 1199

Melon (cantaloup and musk) fruit

- amino acids, sugars, content 6834, 8667
- aroma 7171
- ascorbic acid 165
- composition
 - calcium nutrition 6817
 - dark treatment 5962
 - growth substances, ethephon 2781
 - nitrogen nutrition 6817
 - phosphorus nutrition 6817
- flavour 2783
 - dark treatment 5962
 - number, mulching, paper 6814
 - quality
 - calcium nutrition 6817
 - growth substances, ethephon 2781
 - nitrogen nutrition 6817
 - plant nutrition 165
 - shade 6817
- ripening
 - growth substances, ethephon 1202, 2781
 - mulching, paper 6814
- set
 - growth substances, ethephon 1202
 - nutrition 165
 - pollination 4462
 - pollen mixtures 6833
- size
 - growth substances, ethephon 2781
 - mulching, paper 6814
- sugars
 - content 8667
 - planting, spacing 1994
 - volatile constituents 2008

Melon (cantaloup and musk) growth substances

- endogenous 1199
- plant 1198
- seed 1197-1198
- flower
 - sex
 - aminozide 1199
 - ethephon 1202, 5231
 - GA 1199

Melon (cantaloup and musk) leaf

- area, planting, spacing 1994
- growth phases, nitrogen metabolism 8754

Melon (cantaloup and musk) nutrition

- cobalt, water relations 2773
- copper, water relations 2773
- major elements
 - fruit
 - composition 6817
 - quality 6817
 - manganese
 - toxicity 1998
 - water relations 2773
- nitrogen 4452
 - deficiency 4452
 - flower, sex 165
 - fruit
 - quality 165
 - set 165
 - sources, compared 5214

Melon (cantaloup and musk) nutrition

- contd.
- NPK 6816
 - flower
 - number 8664
 - sex 8664
 - potassium
 - flower, sex 165
 - fruit
 - quality 165
 - set 165
 - zinc, water relations 2773
- Melon (cantaloup and musk) pests**
 - Aphis gossypii*, resistance 4443
 - Aulacophora foveicollis*, varietal resistance 1194
 - Diabrotica* spp., varietal resistance 2001
 - integrated control 3627
 - Margaronia hyalinata* 5957
 - M. nitidalis* 5957
 - Meloidogyne* spp., annual report, USA 1935
 - Peridroma saucia*, control 7669
- Melon (cantaloup and musk) root, growth** 1147
- Melon (cantaloup and musk) rootstocks**
 - disease resistance, annual report, Netherlands 1135
 - scion relationships
 - cell sap, composition, movement 5960
 - incompatibility 155
 - water relations 5960
 - squash 5960
- Melon (cantaloup and musk) seed**
 - composition, growth substances 1197
 - germination
 - irrigation 4376
 - pollination, pollen mixtures 6833
 - temperature 7678
 - number, pollination, pollen mixtures 6833
 - production
 - annual report, Belgium 4363
 - growth substances, ethephon 5231
 - gynocious lines 2006
 - potassium nutrition, phosphorus nutrition, nitrogen nutrition 6816
 - size, pollination, pollen mixtures 6833
 - storage 1185
 - treatment
 - cold
 - cold resistance 7677
 - plant water relations 7677
 - hardening 6809
 - Pseudomonas* spp., *Colletotrichum lagenarium* control 5952
- Melon (cantaloup and musk) soil**
 - seedling emergence 4447
 - steaming, manganese nutrition 1998
- Melon (cantaloup and musk) varieties**
 - annual report, India 3607
 - disease resistance, *Fusarium oxysporum*, f. *melonis* 6806
 - Peninat Ein-Dor 3677
 - pest resistance 4443
 - Venezuela 6807
- Mentha** spp.
 - genetics 6259
 - stomata, structure, development 5494
- Mercurialis** spp., as weeds, artichoke, globe 3633
- Mercury**
 - determination, fruit trees and plants 3315
 - toxicity
 - cucumber and gherkin 157
 - vegetables, tissue culture 121
- Meridarchis scyroides**, *Ziziphus* spp., pests 857
- Merodon equestris**
 - bulbs, pests 7905
 - narcissus pests 7905
 - annual report, UK 3834
- Mesembryanthemum**
 - organic acids
 - metabolism
 - salinity 8930
 - soil salinity 2941
- Mesembryanthemum leaf**
 - senescence
 - organic acids
 - metabolism 2941
 - soil salinity 2941

- Mesembryanthemum propagation**, cuttings, treatment, growth substances 7886
- Mesembryanthemum seed**
sowing, direct, in pots, pelleted 2165
treatment, pelleted 2165
- Mesembryanthemum soil**, salinity, leaf, senescence, organic acids, metabolism 2941
- Metarrhiza anisopliae**, fungal parasite, *Mogannia hebes*, sugar cane 9257
- Metaseiulus occidentalis**
predator on
Eotetranychus willamettei, grapevine 1920
Tetranychus pacificus
grapevine 1920
peach 81
- Metasequoia spp.**, propagation, cuttings, media 8845
- Meteorology**, horticultural aspects 10
- Mexico**, grapefruit, growing 9076
- Mice**, damage, herbicides treatment, fruit trees and plants 1712
- Microbraco triangularis**, parasite of, *Synanthedon tipuliformis*, black currant, red currant 6677
- Microcyclus ulei**
Brazil, rubber diseases 9214
control, rubber diseases 9214
rainfall, rubber diseases 9214
Trinidad and Tobago, rubber diseases 9214
- Microdus dimidiator**, biological control of, *Ageria myopaeformis* 3409
- Microscopy**, electron 4914
- Microxyphiella hibiscifolia**, on plant secretion, *Hibiscus* spp., diseases 4721
- Mikania scandens**, as weeds, rubber 5642
- M. spp.**
as a cover crop, oil palm 6410
as weeds
oil palm 4075
tea 4106
- Milletia spp.**
sterols 4752
terpenoids 4752
- Miltonia spp.**, plant, variation 8934
- Mimosa spp.**
ground cover plants, coffee 7190
leaf, nyctinasty 6235
- Minettia spp.**, bacteria, vectors, *Erwinia amylovora*, pear 5787
- Mint**
annual report, USA 324
breeding and selection 6260
terpenes, content 3945
carbon cycle 6319
chlorophyll, content, soil moisture 6269
essential oil 4738
composition 761, 1415, 3027, 3031, 3033, 3946–3947, 5499, 6259, 9000
harvesting, time of 6265
irrigation, sprinkler 6264
nitrogen nutrition 6263
potassium nutrition 6263
varietal differences 7081
content 3946
irrigation, sprinkler 6264
nitrogen nutrition 6263
plant nutrition 6262
potassium nutrition 6263
soil pH 7080
varietal differences 7081
wilting 4743
diosphenolene, content 3032
extraction 8999
insecticides, residues 8997
production 2328
comparative trials, Tasmania 4744
production and trade, USA 2327
terpenes
biosynthesis 1412
content 1413, 3945
growing
Brazil 2328
India 5500
media, compared 7605
peat 7605
harvesting 2328
hybrids
essential oil 6259
composition 3033
- Mint contd.**
insecticides
absorption
from soil
DDT 7988
lindane 7988
residues
essential oil
methomyl 8997
phorate 8997
plant, methyl-parathion 2320
soil
plant absorption
DDT 7988
lindane 7988
irradiation
gamma rays 8998
mutation induction 6260
irrigation
sprinkler
essential oil 6264
plant composition 6264
nitrogen, metabolism, wilted plants 4743
nutrient absorption, phosphorus, deficiency 337
planting, spacing 6265
taxonomy, chemotaxonomy 9000
terpenes 9000
biosynthesis 3025
tissue culture 8001
water relations, plant composition 4743
- Mint diseases**
Erysiphe cichoracearum 336
Leveillula spp. 336
Phoma strasseri, host-pathogen relationships 759
Puccinia menthae 6261
- Mint growth substances**, essential oil, composition, MH 5499
- Mint leaf**, secretory glands, physiology 3948
- Mint nutrition** 3946
nitrogen 6265
essential oil
composition 6263
content 6263
NPK 6262
phosphorus, deficiency, nutrient absorption 337
plant analysis, electron microprobe x-ray analyser 2490
potassium, essential oil, content 6263
- Mint pests**
Aphelenchoides spp., annual report, UK 4742
nematodes, annual report, German Federal Republic 7064
- Mint soil**
cultivation, methods compared 6265
pH 7080
- Mint varieties**
essential oil
composition 7081
content 4744, 7081
- Mirabilis spp.**, phytochrome, degradation, light, coloured 3736
- Mistletoe**
growing on
cacao, annual report, Ghana 7177
rubber 8184
- Mites**
aerial spraying, apple pests 7372
biological control
citrus pests 366
fruit trees and plants 29
predaceous, population studies, apple 957
review, Iran 1695
- Mitochondria**
saponins, content, pea 7743
seed, germination, pea 656
sterols, content, bean (*Phaseolus*) 2034
strontium, absorption, bean (*Phaseolus*) 187
- Mitragyna parvifolia**, alkaloids 2364
- M. spp.**
alkaloids 2363
content, monthly variations 5526
- M. tubulosa**, alkaloids 9042
- Mogannia hebes**
fungal parasites, sugar cane pests 9257
Taiwan, sugar cane pests 7240
- Molybdenum**
application
foliar
disease incidence, grapevine 7568
grapevine 7568
availability
nitrogen nutrition
chrysanthemum 8589
vegetables 8589
calcium content, pea 5273
deficiency 865, 3299
cucumber and gherkin 7683
growing in peat
chrysanthemum 4382
lettuce 4382
tomato 4382
vegetables 7628
nitrogen nutrition, vegetables 7628
symptoms, cauliflower and broccoli nutrition 1983
enzyme activity
grapevine 1112
leaf, spinach 2747
leaf analysis, cucumber and gherkin 7683
nitrogen, fixation, pea 2814
nitrogen content, pea 5273
nitrogen metabolism, grapevine 1112
phosphorus content, pea 5273
phosphorus nutrition, pea 5272–5273
proteins
content, pea 209
metabolism, spinach 2747
soil, micro-organisms, radish nutrition 618
sources
chrysanthemum 8589
vegetables 8589
toxicity
cucumber and gherkin 7683
nitrogen nutrition
chrysanthemum 8589
vegetables 8589
varietal responses, lettuce 7630
- Momordica cabrei**, medicinal properties 3084
- M. charantia**
varieties
annual report, India 3607
Pusa do Mausami 5948
weeds, watermelon mosaic virus 5951
- Monarda fistulosa**
essential oil
biosynthesis 9001–9002
composition 9002
content 9001
- M. spp.**
essential oil, content 4745
mutants 4745
- Monilia laxa**, apricot diseases 63
- M. linhartiana**, quince diseases 4292
- Monilinia fructicola**
fruit dips, peach diseases 1832
heat treatment, peach diseases 1832
peach diseases 1832
- M. spp.**, cherry diseases 5022
- M. vaccinii-corymbosi**, blueberry diseases, annual report, USA 7490
- Monstera spp.**
nutrition
major elements, plant, analysis 1376
minor elements, plant, analysis 1376
plant, composition, major and minor elements 1376
- Morchella elata**, nitrogen, fixing 8830
- M. esculenta**, growing, USSR 3830
- Morning glory**
light, interaction, growth substances 1339
photoperiodism, flower bud, initiation 2201
- Morning glory flower**
bud initiation
photoperiodism, nucleic acid content 2201
water relations, report, Australia 3831
- Morning glory growth substances**
endogenous 1339
metabolism, GA 1339

Morning glory propagation

- cuttings
 - treatment
 - growth substances
 - GA 4632
 - IBA 4632

Morrenia odorata, as weeds, citrus 3108

Mortierella bainieri, mushroom diseases 7835

Mosses

- control
 - lawns and sports turf 7921
 - nurseries 743
 - tea, annual report, Kenya 7264
 - pot plants, annual report, Netherlands 4604

medicinal properties, survey 775

Mozambique, crops, citrus 360

Mucor piriformis, pear diseases 4285

M. spp., fruit storage, fig diseases 1010

Mulberry

- organic acids, content, seasonal variations 4163
- pollination, fruit, development 7439

Mulberry diseases

- Fusarium solani* 2057
- ringspot, vectors, *Longidorus martini* 8451

Mulberry fruit

- development 7439
- parthenocarpy 7439

Mulberry pests

- Longidorus martini*, vectors, ringspot 8451
- Macronellcoccus hirsutus*, host reactions 5026

Pseudococcus comstocki, population survey, sex traps 5565

Mulberry propagation

- cuttings
 - treatment
 - growth substances
 - IAA 1011
 - IBA 1011
 - sugars 1011

Mulching

- bark, weed control, container-grown plants 8853
- bitumen
 - capsicum 6889
 - spring harvesting, watermelon 3678
- clover-grass mixture clippings
 - apple 936
 - pear 936
- clover-grass mowings, apple 1736
- equipment, mulch-chopper 1736
- foam 4915
- foliage, plant nutrition, tea 7267
- fruit, pigments, capsicum 6037
- grass cuttings, soil conservation, tea 8269
- hay, peach 1017
- lucerne hay, apple 5718
- materials compared, tea, annual report, Kenya 7264
- ornamental, for landscape plantings, annual report, UK 6483
- paper
 - disease incidence, tomato 4570
 - melon (cantaloup and musk) 7679
 - onion 3762
 - plastic coated
 - melon (cantaloup and musk) 6814
 - strawberry 6699
 - tomato 4559
 - vegetables 8747
 - tomato 6071
 - annual report, USA 1935
 - wax coated, tomato 4559
- peat
 - fruit trees and plants 4190
 - grapevine, annual report, German Federal Republic 5072
 - herbicide injury, onion 1251
 - mandarin and tangerine 3991
 - tea 3266, 9274
 - weed control, tea 7268
- pine bark 880
- plastic
 - cabbage 2758
 - capsicum 4538, 6889
 - carrot 2895
 - chicory 5176

Mulching contd.

- plastic contd.
 - cucumber and gherkin 4449
 - disease incidence, tomato 4570
 - grapevine, annual report, German Federal Republic 5072
 - lettuce 2753
 - marrow 156
 - melon (cantaloup and musk) 3680, 7679
 - onion 3762
 - raspberry 3524
 - red currant 7495
 - annual report, Yugoslavia 3517
 - soil
 - moisture, capsicum 6037
 - temperature, capsicum 6037
 - strawberry 1879, 2738, 4327, 6696, 6699-6700, 7529, 7531
 - sugar cane, annual report, South Africa 7230
 - tomato 6071, 7779
 - annual report, USA 1935
 - vegetables 4377-4378
 - annual report
 - Austria 114
 - Netherlands 1132
 - watermelon 7682
 - weed control
 - melon (cantaloup and musk) 7680-7681
 - tomato 3798
- prunings, plant nutrition, tea 7267
- rubber sheeting
 - tea 3266, 9274
- weed control, tea 7268
- sawdust
 - fruit trees and plants 4191
 - tomato 7779
- soil
 - conservation, tea 8269
 - moisture
 - apple 6550
 - fruit trees and plants 4191
 - peach 4256
 - tea, annual report, Malawi 6454-6455
 - strawberry 6700
 - structure, peach 4256
 - temperature
 - carrot 2895
 - chicory 5176
 - fruit trees and plants 4191
 - tea 3266
 - weed control, tea 7268
- straw
 - grapevine 5847
 - annual report, German Federal Republic 5072
- weeds, peach 4256
- Murraya koenigii*, alkaloids 8032
- M. paniculata*, coumarins, content 3973
- Musa spp.*
 - flower, morphology 9128
 - photosynthesis, leaf tearing 382
 - water relations, leaf tearing 382
- Muscari
 - forcing 6165
 - species, comparative trials, German Federal Republic 4669
- Muscari varieties, comparative trials, German Federal Republic 4669
- Mushroom (see also *Agaricus*)
 - anatomy 8829
 - annual report
 - Australia 5882
 - Irish Republic 1939, 6770
 - Netherlands 1132, 6120, 8581
 - UK 5154, 6773-6774
 - breeding and selection 261, 6950
 - buildings
 - moisture, loss, annual report, Netherlands 5
 - sterilization, nematicides 1313
 - cadmium, determination 4389
 - carbohydrates 8828
 - metabolism, mannitol biosynthesis 8827
- casing
 - amendments, cotton seed flour 4596
 - bark, annual report, UK 6483
 - fumigation, methyl bromide 8823
 - materials compared 7829

Mushroom contd.

- casing contd.
 - review 8819
 - time of 4596
- compost 2146, 4596
- amendments 700, 3827
 - bark, annual report, UK 6483
 - farm by-products 3826
 - town compost 1311
- comparative trials 700, 2147, 5379, 6953
- crushed maize 8831
- depth 263
 - temperature 7826
- heat treatment, disease control 1312
- pH 2149
- pine bark 8821
- preparation 701, 2148, 7828, 8821-8822
- rice straw 8822
- sterilization, steam 699, 4601
- sugar cane bagasse 8820
- supplements
 - calcium compounds 2149
 - lipids, water content 6954
 - proteins 8821
 - water content 6954
 - town compost 8821
 - water content 6952
- enzyme activity, organic acids, metabolism 7839
- fungicides
 - injury, benomyl 3829
 - residues, determination, benomyl 7609
 - use, benomyl, review 702
 - yield increase, benomyl 3829
- genetics 7825
- growing 698
 - Netherlands 7827
 - afforestation sites 7511
- containers
 - compared 1310-1311
 - labour requirements 1310
- Czechoslovakia 4597
- economics 4597
- work studies 4597
- Indonesia 2146, 3824, 6121
- growth studies, temperature 6957
- harvesting, mechanical, equipment 7840
- heat treatment, virus control 7833
- herbicides
 - fungus control
 - Mycogone perniciosa*
 - aminotriazole 8824
 - diuron 8824
 - paraquat 8824
 - Verticillium dahliae*
 - aminotriazole 8824
 - asulam 8824
 - dalapon 8824
 - diuron 8824
 - paraquat 8824
 - simazine 8824
- histology 5380
- insecticides
 - residues
 - cap
 - demeophion 8826
 - dichlorvos 8826
 - dimethoate 8826
- irradiation
 - gamma rays, cap, post-harvest 7841
 - ionizing, disease control 604
- labour requirements, annual report, Belgium 5906
- lead, determination 4389
- mannitol, biosynthesis, carbohydrates metabolism 8827
- organic acids, metabolism 7839
- proteins, content, compost type 700
- spawn
 - granular 8818
 - production 8831
 - storage 5378, 6951
- storage 703
 - cold 7841
- temperature
 - growth studies 6957
 - requirements 4598
- varieties and strains 7825
- testing methods 264
- watering 262
- fluoridated water 4599

- Mushroom cap**, production, micro-organisms, application 5381
- Mushroom diseases**
- Dactylium dendroides*, soil steaming 6956
- Dieliomyces microsporus*, biological control 7834
- Geotrichum candidum*, soil steaming 6956
- Mortierella bainieri* 7835
- Mycogone perniciosa*
- control, herbicides 8824
- soil steaming 6956
- Ostrachoderma* spp., soil steaming 6956
- Pseudomonas agarici* 2904
- Pseudomonas tolaasii*, biological control, bacteria 2905, 3828
- review 7830
- Trichoderma* spp. 1312
- T. viride*, soil steaming 6956
- Verticillium malthousei* 4601, 8825
- control, herbicides 8824
- soil steaming 6956
- virus 7831–7832
- annual report, Netherlands 6772
- control 7831
- heat treatment 7831, 7833
- Mushroom nutrition**
- carbon, nitrogen balance 8823
- nitrogen, carbon balance 8823
- Mushroom soil**, sterilization, steam, disease control 6956
- Mustard**
- carbon dioxide, evolution, light 7073
- chlorophyll
- biosynthesis 3021
- metabolism 3021
- enzyme activity 1954, 6009
- light
- far red: 7980
- red 7980
- seed, ascorbic acid treatment 3013
- enzymes
- biosynthesis 3012
- degradation 3012
- extraction 2316–2317
- seedling 3012
- glucosinolate, biosynthesis 3020
- humidity, relative, water relations, culture solution osmotic potential 8985
- light
- carbon dioxide, evolution 7073
- far-red
- enzyme activity 7980
- responses 334
- red, enzyme activity 7980
- nucleic acids
- biosynthesis, growth substances 3942
- flower bud, initiation 3010
- oil, biosynthesis, seed, development 4736
- photoperiodism, flower bud initiation 333
- phytochrome
- chlorophyll
- biosynthesis 3021
- metabolism 3021
- pollination, bees, seed production 5899
- proteins
- biosynthesis, seed, development 4736
- flower bud, initiation 3010
- steroids, content, seed, ripening 7970
- tissue culture, cotyledon 6804
- water relations, relative humidity, culture solution osmotic potential 8985
- weed control 3935
- annual report, German Federal Republic 7964
- Mustard diseases**, cabbage yellows, incidence 614
- Mustard flower**
- bud initiation
- inhibition 5491
- nucleic acids 3010
- Mustard flower contd.**
- bud initiation contd.
- photoperiodism 331, 333
- proteins 3010
- Mustard growth substances**
- growth inhibition, 5-fluorodeoxyuridine 3942, 7074
- nucleic acids, biosynthesis, 5-fluorodeoxyuridine 3942
- responses, Triton X-100 7665
- Mustard pests**
- Lipaphis erysimi* 330
- control 7971
- Mustard plant**, composition 6247
- Mustard root**, development, growth substances 7665
- Mustard seed**
- aroma 332
- composition, sinalbin 332
- development 4736
- oil, composition 7981
- fatty acids, metabolism 7969
- flavour 332
- glycerides, metabolism 7969
- lipids, metabolism 7969
- oil, composition 7981
- production, pollination, bees 5899
- proteins 2318
- ripening, steroids, content 7970
- Mustard seedling**, chlorophyll, biosynthesis 186
- Mustard soil**, temperature, disease incidence 614
- Mustard varieties** 6247
- Mutagens**
- dimethylsulphate, tomato 7769
- disease resistance, *Deuterophoma tracheiphila*, lemon 8060
- ethyl methane sulphonate, peach 6635
- herbicides as, Bladex, tradescantia 1346
- insecticides as, mevinphos, tradescantia 1346
- N-nitrosomethylurea, tomato 7769
- Mutants**
- induction
- grafting, capsicum 2839
- irradiation, gamma rays 8295
- leaf cuttings, *Kalanchoe* spp. 3903
- Mycetaspis personatus**
- mango pests 399
- population studies
- Ficus* spp., pests 811
- mango pests 811
- Mycogone perniciosa**
- control, herbicides, mushroom diseases 8824
- mushroom diseases, annual report, UK 6773
- soil steaming, mushroom diseases 6956
- Mycophila speyeri**, mushroom pests 2150
- Mycoplasma** 17, 1673
- control
- antibiotics 278
- lethal yellowing, coconut 5616
- Opuntia* spp. 1373
- ornamental plants 5410
- cross protection, tomato 5349
- fungicides, benomyl, *Santalum* spp. 3038
- review, sandal spike, *Santalum* spp. 2329
- histological studies
- pear, annual report, German Federal Republic 6504
- proliferation, apple 4984
- indicator plants
- Datura stramonium* 278
- Vinca* spp. 290, 6270
- morphology, peach 2641
- plant diseases, review 7299
- review 889, 5410, 7298
- fruit trees and plants, diseases 890
- structure, lavender diseases 762
- transmission, coconut 4054
- vectors 17
- dodder, sandal spike, *Santalum* spp. 6270
- leafhoppers, green petal, *Primula* spp. 4634
- Macrosteles sexnotatus*
- aster yellows
- gladiolus 290
- hyacinth 7007
- Mycoplasma contd.**
- vectors contd.
- Macrosteles sexnotatus* contd.
- 'lisser' syndrome, hyacinth 290
- Matsumuratettix hiroglyphicus*, white leaf, sugar cane 7243
- Orosius argentatus*, legume little leaf 278
- Mycorrhiza**
- amino acids, metabolism, hazel 7435
- orchids 5459
- relationships
- cymbidium 310
- onion 6880
- orchids 310
- seedling growth, citrus 7132
- soil, arsenic content, apple 8373
- Mycosphaerella brassicicola**
- cabbage diseases, annual report, New Zealand 5152
- cauliflower and broccoli diseases 1170
- varietal resistance, brussels sprouts diseases, annual report, UK 4366
- M. citri**
- grapefruit diseases 3127
- orange diseases 3127
- rootstock resistance, grapefruit diseases 9092
- M. citrullina**, watermelon diseases, annual report, USA 8585
- M. fijiensis**, banana diseases 4834
- M. fragariae**
- boron nutrition, strawberry diseases 5817
- control, strawberry diseases 8482
- copper nutrition, strawberry diseases 5817
- manganese nutrition, strawberry diseases 5817
- strawberry diseases 1073, 1883–1884, 4324
- M. horii**, citrus diseases 797
- M. ligulicola**
- control, chrysanthemum diseases 6973
- environmental factors, chrysanthemum diseases 4626–4627
- forecasting, chrysanthemum diseases 1333
- varietal resistance, chrysanthemum diseases, annual report, USA 1441, 6129
- Mycosphaerella musicola**
- banana diseases 379, 4834
- annual report, Western Samoa 8122
- M. pinodes**, seed treatment, pea diseases, annual report, UK 1934
- M. pomi**, apple diseases 952
- M. ribis**
- black currant diseases, annual report, UK 3514
- varietal differences, black currant diseases 4308
- varietal resistance, red currant diseases 4308
- M. spp.**
- banana diseases, annual report, Australia 5600
- grapefruit diseases 3132
- orange diseases 3132
- varietal resistance, banana diseases 1540
- Myloccerus subfasciatus**, resistance, eggplant pests, annual report, India 3607
- Myoporum spp.**, propagation, cuttings 2167
- Myosotis spp.**, weed control, annual report, German Federal Republic 6959
- Myrcia spp.**, growing, tropical America 377
- Myrciaria jaboticaba**, fruit, composition 7273
- M. spp.**, growing, tropical America 377
- Myricaceae**
- essential oil
- chemotaxonomy 9003
- composition 9003
- taxonomy, essential oil 9003
- Myrobalan**
- defoliation, potassium iodide, magnesium chlorate, calcium cyanide 6512
- as a rootstock
- damson 1040
- peach 76, 1014
- plum 1040
- water relations, leaf, carbohydrates, content 1852

Myrobalan contd.

- weed control, nurseries 7316
- Myrobalan fruit**, ripening, date, varietal differences 521
- Myrobalan growth substances**
 - endogenous, seed 2523
 - responses, chlormequat 8329
- Myrobalan leaf**, carbohydrates, content 1852
- Myrobalan propagation**, cuttings, treatment, growth substances, IBA 1850
- Myrobalan root**
 - growth
 - soil moisture 6656
 - soil temperature 6656
- Myrobalan rootstocks**
 - scion relationships
 - leaf, carbohydrates, content 1852
 - water relations 1852
- Myrobalan seed**
 - germination, metabolic processes 2523
 - treatment, stratification, metabolic processes 2523
- Myrobalan soil**
 - moisture, root growth 6656
 - temperature, root growth 6656
- Myrobalan varieties**
 - fruit, ripening, date 521
 - register, USA 4156
 - winter hardiness 521
- Myrothecium roridum**, varietal resistance, eggplant diseases 6050
- Myrtillocactus spp.**, edible fruits 822
- Myrtus spp.**
 - essential oil, terpenes, content, leaf colour 4746
 - growing, tropical America 377
- Mythimna phaea**
 - biological control, sugar cane pests 8234
 - damage, sugar cane pests 8234
 - forecasting, light traps, sugar cane pests 8234
- M. spp.**, sugar cane pests, annual report, South Africa 7230
- Myzus cerasi**, aerial spraying, cherry pests 8438
- M. persicae**
 - brussels sprouts pests 147
 - capsicum pests 4540
 - annual report, German Federal Republic 8579
- control**
 - chrysanthemum pests 6973, 6975
 - cut flowers, chrysanthemum pests 6976
 - peach pests 7448
 - lettuce pests 1158
 - peach pests, annual report, Australia 5693
 - radish pests 1180
- resistance**
 - brussels sprouts pests 1697
 - chrysanthemum pests 1697
- vectors**
 - potato virus Y, capsicum pests 6040
 - tobacco etch, capsicum pests 6040
 - virus
 - bean (*Vicia*) pests 6846
 - pea pests 6846
 - virus, vectors, cauliflower and broccoli pests 1168
 - virus vectors, beet western yellows, lettuce pests 1969
- Nacoleia octasema**, banana pests, annual report, Western Samoa 8122
- N. octosema**, banana pests 380
- Narcissus**
 - annual report
 - Netherlands 2219, 6127
 - UK 732-733, 2153, 3834, 3871, 3874, 7907
 - flowering, date, bulb, storage temperature 3872
 - forcing 6165
 - bulb, storage temperature 3872, 4663
 - temperature 4663
 - planting
 - spacing 7011
 - systems 7011
 - time, Italy 4662
 - pollen, viability, varietal differences 8899
- Narcissus bulb**
 - development 8897

Narcissus bulb contd.

- heat treatment 1690
- lifting, frequency 7011
- production, varietal differences 8898
- size, planting, spacing 7011
- storage
 - temperature 4663
 - flowering date 3872
- Narcissus diseases**
 - annual report, USA 1315
 - arabis mosaic, shoot-tip culture 7012
 - broad bean wilt 7904
 - cucumber mosaic 7904
 - degeneration, shoot-tip culture 7012
 - Rosellinia* spp., alternative hosts 7013
 - tobacco rattle 7904
 - tomato ringspot 2254
- Narcissus flower**
 - cation exchange capacity, composition 7874
 - cut
 - fluorine injury, tap water 2913
 - vase life 4664
 - number
 - bulb size 7011
 - planting, spacing 7011
- Narcissus growth substances**, endogenous, leaf, translocation 706
- Narcissus pests**
 - Ditylenchus dipsaci* 6186
 - Eumerus strigatus* 7905
 - E. tuberculatus* 7905
 - Merodon equestris* 7905
 - Xiphinema americanum*, vectors, tomato ringspot 2254
- Narcissus plant**, cation exchange capacity, composition 7874
- Narcissus propagation**
 - meristem, tissue culture 7012
 - shoot-tip culture, virus-free plants 7012
- Narcissus varieties**
 - bulb, production 8898
 - pollen viability 8899
- Nasturtium**
 - cytology 4646
 - light, intensity, measurement 1675
- Nasturtium growth substances**, responses, dwarf plants, IAA 4647
- Natsudaïdai**
 - storage
 - cold
 - fruit
 - acidity 6361
 - carbon dioxide evolution 6361
 - controlled atmosphere
 - carbon dioxide concentration 7154
 - chilling injury 6360
 - disease incidence 6360
 - fruit, composition 6360
 - temperature 7154
- Natsudaïdai diseases**
 - Penicillium* spp., fruit storage 6360
 - Xanthomonas citri*, pathogen survival 5561
- Natsudaïdai disorders**, button browning, fruit storage 7154
- Natsudaïdai fruit**
 - acidity, storage temperature 6361
 - amino acids, content 7157
 - colour, storage, controlled atmosphere 7154
 - composition 7157
 - storage 6360
 - controlled atmosphere 7154
 - flavour, storage, controlled atmosphere 7154
 - organic acids
 - content 7157
 - seasonal variations 4020
 - sugars
 - content 7157
 - seasonal variations 4020
- Naupactus bondari**, cacao pests 3185
- N. spp.**, cacao pests 3185
- Nectarine**
 - annual report, Italy 6507
 - breeding and selection, annual report, USA 451
 - frost, resistance, flower bud development 7440
 - growing, Italy 503

Nectarine diseases

- Colletotrichum dematium*, pathogenicity 8515
- Sclerotinia fructicola*, post-harvest dips 7481
- Nectarine flower**, bud development, frost resistance 7440
- Nectarine fruit**, thinning, chemical, time of, seed development 3484
- Nectarine propagation** 26
- Nectarine seed**, development, fruit, thinning 3484
- Nectarine varieties** 1013
 - Cherokee 4246
 - Early Sungrand 505
 - Fantasia 4247
 - Flavortop 4246
 - F100-62 4247
 - Independence 505
 - Italy 3460-3463
 - Moon Grand 505
- Nectared 8 4246
- Nectared 9 4247
- New Zealand 4245
- register, USA 3356, 4156
- review, Italy 6625
- Stark Redgold 4246
- Stark Sunglo 505
- Sun Grand 4247
- USA 1012
- USSR 7440
- Nectria galligena**
 - apple diseases 5006
 - annual report
 - Netherlands 5697-5698
 - UK 903, 4172, 8318
 - fruit storage, apple diseases 5751
 - host benzoic acid, content, apple diseases 5755
 - wound healing, apple diseases 4207
- N. radicola**
 - control, lily diseases 7902
 - rhubarb diseases 8750
- Nematicidal principles**, compositae 283
- Nematicides**
 - aldicarb
 - application
 - methods compared
 - rose 7948
 - sugar cane 7246
 - pest population increase, tomato 7800
 - application, equipment 4131
 - Basamid, pest population increase, vegetables 8811
 - Ciba 14421, application, methods compared, litchi 6373
 - dazomet, seedling, emergence, onion 1254
 - DBCP
 - application
 - methods compared
 - litchi 6373
 - sugar cane 7246
 - banana pests 828
 - DD, application, methods compared, sugar cane 7246
 - Di-Trapex
 - injury, peach 4258
 - pest population increase, vegetables 8811
 - EDB, application, methods compared, sugar cane 7246
 - interaction, fungicides, lawns and sports turf 2266
 - Mocap
 - application, methods compared, litchi 6373
 - injury, varietal differences, chrysanthemum 6977
- Nemacur**
 - application, methods compared, lemon 3133
 - granular, soil incorporation, tomato 1290
 - persistence, soil 446
 - seed, treatment, vegetables 2394
 - translocation 446
 - okra 2394
- Nemagon**, injury, rose 1392

Nematicides *contd.*

- various
 - application
 - methods compared, sugar cane, annual report, South Africa 7230
 - sub-surface, annual report, UK 2487
- Vorlex, injury, strawberry 8514
- Vydate, application, methods compared, rose 7948

Nematodes

- bacteria
 - disease complex 445
 - almond 3367
- book 2484
- control
 - book 2484
 - cultural methods, review 7300
 - soil steaming, apple pests 6562
- fungi
 - disease complex 445
 - tomato 2877
- host-parasite relationships 445
- resistance 3316
- integrated control, tree fruits, annual report, Canada 2515
- review 445
 - France, vegetables 2741
- virus, disease complex 445
- virus vectors, review 2502

Nematospora coryli, pistachio diseases 6653**Nemesia** seed

- sowing, direct, in pots, pelleted 2165
- treatment, pelleted 2165

Nemophila spp.

- seed
 - germination
 - inhibition
 - light
 - blue 3861
 - far-red 3861
 - reversal, light, red 3861

Neomillspaughia amarginata, as weeds, citrus 6340**Nepeta** spp., lactones 3028**Nephantis serinopa**

- coconut pests 3190, 9157
- annual report, Sri Lanka 7185

Nercum spp., growth substances, dwarfing, MH-30 1384**Nerine**

- annual report, Netherlands 6127
- cytology 6182
- flowering
 - bulb storage
 - relative humidity 7906
 - time 7906
- growing
 - in greenhouses 3873
 - Netherlands, for production throughout the year 7906
- taxonomy, cytotoxonomy 6182

Nerine bulb

- storage 3873
- relative humidity 7906
- time 7906

Nerine treatment, fungicides, benomyl 5433**Nerine** diseases

- Fusarium moniliforme*, f. *subglutinans*, control 5433
- virus, annual report, Netherlands 6961

Nerine flower

- bud initiation 7906
- cut, fluorine injury, tap water 2913

Nerium spp.

- glycosides 3005
- propagation, cuttings 2168

Netherlands

- capsicum, growing 4530
- capsicum varieties, comparative trials, 8751
- carnation
 - economics 6137
 - growing, economics 8854
- fruit trees and plants, economics 4150
- horticultural crops, economics 5672
- mushroom, growing, 7827
- nerine, growing, for production throughout the year 7906
- tomato, growing, disease incidence 6087

Netherlands *contd.*

- trees and shrubs, growing, economics 7031
- vegetables
 - growing
 - economics 6775
 - under glass 6775

New journals

- Annali dell'Istituto Sperimentale per l'Agricoltura 4118
- Arquivos da Universidade Federal Rural do Rio de Janeiro 4911
- Biochemical Society Transactions, formerly Proceedings of the Biochemical Society 6471
- bulletin de l'Académie des Sciences Agricoles et Forestières 8281
- Journal of Turkish Phytopathology 8282
- Malaysian Agricultural Research 5669
- Mushroom Journal, formerly MGA Bulletin 4119
- Nouvelles Maraîchères et Vivrières de l'INRA aux Antilles 5668
- Plant Science Letters 7275
- Scientia Horticulturae 7276

New Zealand, Phaseolus angularis, growing 5976**Nezara viridula**

- control, *Crotalaria* spp. planting, macadamia pests, report, USA 6324
- peach pests, annual report, USA 4945

Nickel, leaf analysis, standards, fruit trees and plants 2496**Nicotiana** spp.

- diseases, pea mild mosaic 4502
- essential oil, composition 4644
- flower, formation, minor elements, nutrition 1343
- nutrition
 - boron, application, foliar 1343
 - manganese, application, foliar 1343
 - zinc, application, foliar 1343
- seed, production, minor elements, nutrition 1343
- water relations, minor elements, nutrition 1343

Nigella flower

- bud initiation 3816
- development 3816

Nigella spp., cytology, vegetative apices, floral apices, petals 2855**Nigeria**

- carrot, growing 5371
- Rhaphia hookeri*, growing, annual report, Nigeria 9181

Nigrospora spp., epiphyte, pecan 2653**Nipa fruticans**, flower, morphology 3953**Niphaolepis alianta**

- coffee pests 1583
- tea pests 4110

Nitralin, injury, cucurbits 623**Nitrates**

- absorption
 - growth substances, amino acids, pea 4509
- nitrogen nutrition, apple, report, Australia 3344
- biosynthesis, red light, *Salvia sclarea* 7085
- content
 - apple, nitrogen nutrition, report, Australia 3344
 - citrus, leaf, NPK nutrition 2384
 - cucumber and gherkin, nitrogen nutrition 2870
- fruit
 - papaw 3247
 - ripening, papaw 3248
- okra, fruit, nitrogen nutrition 2091
- spinach, nitrogen nutrition 1957
- tomato, nitrogen nutrition 2870
- determination, spectrophotometric, spinach 7619

Nitrite

- toxicity
 - nutrient solution, pH, vegetables 5893
- vegetables 5893

Nitrogen

- absorption
 - leaf
 - apple 2571
 - apricot 2612
 - mandarin and tangerine 9084–9085

Nitrogen *contd.*

- absorption *contd.*
 - orange 6342–6343
 - peat pH, chrysanthemum 6145
 - soil management, apple, annual report, Netherlands 5697
 - water table, *Vaccinium* spp. 6686
 - zinc sources, orange 3121
- alkaloids, content, poppy 7112
- aluminium toxicity, pea 7728
- ammoniacal concentration, vegetables 1968
- ammonium toxicity, chrysanthemum nutrition 2189
- apical dominance, bean (*Phaseolus*) 8698
- application
 - foliar
 - apple 2571
 - apricot 2612
 - Colletotrichum coffeanum* incidence, coffee nutrition 1579
 - grapevine 8552
 - orange 6342–6343
 - rhizosphere micro-organisms, population studies, capsicum 6038
 - strawberry nutrition 1880
 - tea 3273
 - irrigation, sprinkler, apple 947
 - methods compared
 - cucumber and gherkin 5950
 - sugar cane 1630
- time
 - apple 4972
 - bean (*Phaseolus*), annual report, Zambia 8586
 - eggplant 6898
 - frost resistance, apple 4971
 - fruit, disorders, apple 947
 - mandarin and tangerine 8070, 9084–9085
 - sugar cane nutrition 1627
 - tomato 3800
- ascorbic acid, content, lemon 3113
- availability, cucumber and gherkin 117
- bud-break, apple 4973
- calcium content, blueberry 7515
- cane, juice quality, sugar cane 8202
- carbohydrate, metabolism, apple 39
- carbon balance, mushroom 8823
- cold
 - resistance
 - lawns and sports turf 304
 - Stenotaphrum* spp. 2179, 5448
- content
 - biennial bearing
 - apple 970–971
 - mango 3239
 - boron nutrition, spinach 126
 - copper nutrition, coffee 393
 - disease resistance, *Deuterophoma tracheiphila*, citrus 3131
 - flower, peach 6631
 - flower bud, sex, melon (cantaloup and musk) 8663
 - frost resistance, citrus 3131
 - fruit
 - development, plum 6663
 - peach 6631
 - phosphorus nutrition, capsicum 8753
 - potassium nutrition, capsicum 8753
 - tomato grafted on potato 8796
 - growth substances, cauliflower and broccoli 7660
 - herbicides, simazine, apple 968
 - leaf
 - apple 6553
 - boron nutrition, guava 8161
 - drought, sugar cane 2474, 8200
 - flooding, sugar cane 2474, 8200
 - nutrient source, *Agrostis* spp. 3893
 - phosphorus nutrition, capsicum 8753
 - potassium nutrition, capsicum 8753
 - rootstocks, plum 2657
 - seasonal variations
 - apple 6554
 - peach 508
 - soil management, peach 1017
 - soil sterilization, tomato 240
 - soiless culture, grapevine 6749
 - varietal differences, apple 6554

Nitrogen contd.

- content contd.
 manganese nutrition, orange 1481
 phosphorus nutrition
 citrus 2384
 orange 1478
 plant
 fruiting, fruit trees and plants 5705
 herbicides, simazine, strawberry 545
 potassium nutrition, tomato 6909
 report, German Federal Republic 8284
 seasonal variations
 peach 508
 tomato 6909
 storage, grapevine 5830
 potassium nutrition, citrus 2384
 rhizome, bud development, blueberry 1064
 root, fruit, ripening, grapevine 1123
 seasonal variations
 apple 49
 blueberry 535
 shoot
 root temperature, chrysanthemum 8863
 seasonal variations, apple 6554
 varietal differences, apple 6554
 tuber, tomato grafted on potato 8796
 water deficiency, apple 4962
 water relations, apple 38
 zinc nutrition, orange 1481
 controlled atmosphere storage, fruit 3361
 cucumber and gherkin 6826
 darkness, tomato 5356
 deficiency
 coffee 9166
 glycosides, content, tomato 8794
 leaf analysis, tea, annual report, Sri Lanka 8262
 melon (cantaloup and musk) 4452
 symptoms
 coffee 3197-3198
 ginger 5492
 tomato 4567
 tomato 4567
 determination, methods 8289
 disease development
Phomopsis theae, tea 5662
Rhizoctonia solani, *Fusarium solani*, bean (*Vicia*) 4489
 disease incidence
Botrytis cinerea, tomato 5345
 capsicum 2846
Cercospora coffeicola, coffee 9167
Helminthosporium incurvatum, coconut 9149
 lawns and sports turf 7023, 8918
Phytophthora infestans, tomato 5345
 disease resistance
Aster spp. 6992
Valsa mali, apple 475
 disorder incidence, apple 4972
 enzyme activity
 apple 7398
 leaf, sugar cane 8251
 shoot, pea 3741
 essential oil
 composition, mint 6263
 content
 chamomile nutrition 3054
 mint 6263
 fixation
 cobalt nutrition, pea 2814
 molybdenum nutrition, pea 2814
 fixing
Morchella elata 8830
Pleurotus ostreatus 8830
 root nodule bacteria, enzyme activity, pea 1229
 flower
 calyx splitting, carnation nutrition 1325
 colour, rose 2294
 cut, life, chrysanthemum nutrition 718
 number
 apple 8368
 rose 7946
 zinnia 7892
 quality
 chrysanthemum nutrition 718
 rose nutrition 748

Nitrogen contd.

- flower contd.
 sex
 cucumber and gherkin 166
 melon (cantaloup and musk) 165
 size, *Zantedeschia* spp. 2950
 stem length, rose 7946
 flower bud
 development, banana 4041
 fruiting potential, grapevine 3578
 initiation
 apple 947, 8368
 banana 4041
 black currant 1860
 tree fruits 2530
 flowering
 date
 chamomile 3972
 chrysanthemum nutrition 718
 mandarin and tangerine 8070
 frost resistance, black currant 8485
 fruit
 amino acids, content, apple 7370
 ascorbic acid, content, apple 8415
 bunch size, grapevine 8552
 colour
 apple 6605, 8368
 mandarin and tangerine 8070
 tomato 7786
 composition
 apple 6557, 6605, 8378
 ascorbic acid, melon(cantaloup and musk) 165
 blueberry 6690
 mandarin and tangerine 8070
 orange 1478-1479, 7159
 papaw 842, 1607
 tomato 7786, 8805
 flavour
 orange 7159
 raspberry 6682
 maturity, peach 8456
 number, apple 8368
 quality
 grapevine 8552
 juice content, orange 6342-6343
 melon(cantaloup and musk) 165
 orange 7159
 set
 black currant 8485
 melon(cantaloup and musk) 165
 size
 blueberry 7515
 orange 1478-1479
 peach 508
 plum 7473
 tomato 7786
 storage life, apple 6557
 grass colour, lawns and sports turf 304
 host-pathogen relationships, *Fusarium martii*, pea nutrition 2055
 insecticides, sugar cane 7251
 interaction, growth substances, bean (*Phaseolus*) 7718
 leaf
 abscission, blueberry 8495
 amino acids, content, tea 3289
 chlorophyll, content, mandarin and tangerine 6352
 colour
 capsicum 8752
 coleus 6133
 composition
 apple 4977
 ascorbic acid, cabbage 143
 protein, cabbage 143
 tea 6466
 fall, apple 4973
 pigments
 apple 5724
 tea 3287
 size, blueberry 8495
 leaf analysis
 apple 3402, 8375
 black currant nutrition 1860
 carrot 6109
 chrysanthemum 7856
 citrus 1484
 coffee 1570, 3198
 grapefruit 2384
 lemon 2384
 mango 5631
 oil palm 7214

Nitrogen contd.

- leaf analysis contd.
 orange 1478, 2384
 pea 6005
 peach 1018, 3472
 petiole analysis compared, grapevine 8551
 rubber 1616
 seasonal variations, annual report, India 1657
 v soil analysis, coffee 3195
 soil management methods compared, apple 8358
 sugar cane 412, 1630, 8213
 leaf litter analysis, cacao 7181
 light absorption, apple 5724
 magnesium nutrition, viburnum, annual report, USA 6129
 metabolism
 apple, annual report, UK 903
 molybdenum nutrition, grapevine 1112
 phosphorus, grapevine 7581
 photoperiodism
 capsicum 8754
 melon (cantaloup and musk) 8754
 orange 8754
 wilted plants, mint 4743
 nitrate accumulation
 cucumber and gherkin 2870
 spinach 1957, 2746
 tomato 2870
 nutrient availability, tea 3274
 nutrition, glycoside, content, tomato 249
 petiole analysis, leaf analysis compared, grapevine 8551
 phosphorus absorption
 apple 466
 peach 466
 phosphorus content, tea 7267
 phosphorus nutrition
 mandarin and tangerine 9083
 pea 7728
 pineapple 9199
 photosynthesis
 citrus 9100
 tomato 6907
 physiological responses 4
 placement
 apple, annual report, Netherlands 5697
 methods compared, root growth, apple 8377
 plant
 composition
 amino acids, apple nutrition 49
 essential oil, mint, annual report, USA 324
 manganese content, tomato 4563
 plant analysis, sugar cane 3257, 6437
 planting, spacing, onion 8739
 potassium absorption
 apple 466
 peach 466
 potassium content
 persimmon 4029
 plum 7473
 potassium imbalance
 coffee 9167
 stem length, rose 2294
 potassium nutrition
 mandarin and tangerine 9083
 pineapple 9199
 plum 7473
 proteins, content, bean (*Phaseolus*) nutrition 5242
 pseudostem, girth, banana 4041
 relative humidity, apple 7351
 replanting, peach 1821
 requirements
 light intensity, tomato 6908
 vegetables 4381
 respiration
 leaf, tea 3281
 root, tea 3281
 sex expression, spinach 127
 soil analysis
 cacao 7181
 rubber 1616
 soil management methods compared, apple 8358
 tomato 4560
 soil moisture, apple 7351

Nitrogen *contd.*

- sources
 - ammonia, vegetables, nutrition, annual report, UK 1934
 - aqueous ammonia, brussels sprouts, annual report, UK 1937
 - cabbage 119
 - chlorosis, *Vinca* spp., nutrition 1442
 - compared
 - Agrostis* spp., 3893
 - apple 4972, 8378
 - annual report, Netherlands 4956
 - report, Australia 3344
 - bean (*Phaseolus*) nutrition 172
 - cucumber and gherkin 2870
 - horse-radish 8972
 - mandarin and tangerine 7134
 - melon (cantaloup and musk) 5214
 - nursery stock 267
 - orange 9087
 - spinach beet 5904
 - strawberry 1880, 7534
 - sugar cane 8216
 - tea 6457, 8270, 9276
 - annual report
 - Malawi 6454
 - Sri Lanka 8262
 - tomato 1286, 2870, 3800
 - fruit, disorders, apple 947
 - leaf, composition, sulphur, lawns and sports turf 6193
 - leaf quality, tea 9275
 - leek 119
 - liquid, container-grown plants 2170
 - minor elements
 - availability
 - chrysanthemum 8589
 - vegetables 8589
 - toxicity
 - chrysanthemum 8589
 - vegetables 8589
 - nutrient absorption, tea 6457
 - nutrient availability, tea 3275
 - respiration, apple 1771
 - root composition, tea 8270
 - root growth, tea 8270
 - slow-release 3
 - melon (cantaloup and musk) 5214
 - tomato 5214, 7785
 - urea formaldehyde 267
 - soil pH, tea, annual report, Sri Lanka 8262
 - soilless culture, blueberry nutrition 4319
 - spinach 119
 - sulphur-coated, watermelon 3683
 - transpiration, coffee 9171
 - urea, grapevine 8552
 - sucrose, content, sugar cane 1626
 - toxicity
 - cucumber and gherkin 2870
 - fruit, drop, marrow nutrition 1203
 - strawberry 7534
 - tomato 2870, 3800
 - translocation, mandarin and tangerine 9084-9085
 - winter hardiness
 - blueberry 7515
 - cherry 6617
 - holly 2311
 - pyracantha 2311
 - Nodostoma subcostatum*, banana pests 380
 - Nodulisporium indicum*, mango diseases 4869
 - Nopalea* spp., edible fruits 822
 - Norway, flowers, cut, production 5387
 - Notholirion* spp., tuliposides 8908
 - Notocactus* spp.
 - flower, bud initiation, temperature, photoperiodism 6200
 - photoperiodism, temperature, flower bud, initiation 6200
 - NPK**
 - application, foliar, strawberry 5816
 - fruit, composition, peach 6629
 - leaf analysis, strawberry 6702
 - pest resistance, scale insects, orange 2397
 - soil compaction, sugar cane 8212
 - soil composition, strawberry 6703

Nucleic acids

- applied
 - pollen
 - germination
 - apple 2651
 - pear 2651
 - biosynthesis
 - actinomycin D, bean (*Phaseolus*) 7719
 - artichoke, jerusalem, report, Australia 3602
 - bean (*Vicia*) 3725-3726
 - diseased leaves, cucumber and gherkin 8662
 - ethylene, pea 2065
 - flower bud, initiation, *Ipomoea* spp. 3849
 - growth substances, pea 221
 - inhibition, growth substances, pea 3751
 - inhibitor, virus, control 888
 - onion 5314
 - plant, salinity, tomato 6927
 - pollination, cucumber and gherkin 3693
 - soil salinity
 - Luffa cylindrica* 2838
 - okra 2838
 - virus, host, reactions, bean (*Vicia*) 200
 - composition, irradiation resistance, pea 1241
 - content
 - cold resistance, *Albizzia* spp. 1398
 - growth substances, pea 4500
 - plant, salinity, tomato 6927
 - seedling, growth substances, lettuce 6789
 - extraction
 - artichoke, jerusalem 4398
 - coffee 3208
 - hazel 3337
 - flower bud, initiation, mustard 3010
 - metabolism
 - carrot 226
 - ethylene, pea 4512
 - etiolated leaves, bean (*Phaseolus*) 5983
 - growth substances
 - cucumber 151
 - kale 151
 - kinetin, tissue culture, carrot 1307
 - pea 6012
 - iron, tissue culture, carrot 1307
 - leaf, development, pea 5289
 - light, pea 6012
 - pea 226
 - phosphorus, tissue culture, carrot 1307
 - plant nutrition, pea 6870
 - translocation, parsley, tissue culture 4734
 - Nucleotides**, interaction, growth substances, pea 1237
 - Numicia viridis*
 - aerial spraying, sugar cane pests 8241
 - parasites, sugar cane pests 8241
 - varietal resistance, sugar cane pests 7248
 - Nursery stock**
 - annual report, UK 3347, 4605
 - cold, injury, annual report, UK 8318
 - container-grown
 - media
 - annual report
 - Canada 3370
 - UK 6128
 - USA 1315
 - temperature, container type 3305, 6214
 - nutrition 267
 - annual report, UK 6128
 - winter hardiness, container type, holly 6214
 - containers
 - evaporation, recording apparatus, lysimeters 4128
 - plastic, pots 2493
 - types compared
 - media temperature 3305
 - soil temperature 439, 8297
 - wood baskets, preservatives, rhododendron 6223
 - defoliation
 - annual report
 - German Federal Republic 7310, 7844
 - UK 8316
 - chemical 5716

Nursery stock *contd.*

- defoliation *contd.*
 - growth substances 6511, 7314
 - ethephon 5024
 - surfactants 6510-6511, 7314
- diseases
 - Agrobacterium rhizogenes* 7318
 - A. tumefaciens* 7318
 - Phytophthora cinnamomi* 7318
 - Rossellinia necatrix* 7318
 - Sclerotium rolfsii* 7318
- overwintering, annual report, Canada 8836
- production
 - economics 5702
 - refresher course 4612
- propagation, methods, review 2166
- root pruning, apple, annual report, Netherlands 2516
- storage, cold, annual report, UK 8318
- weed control 2986, 4924
- Nutmeg**
 - as medicinal plants 7975
 - seedling, sex, determination, colorimetric test 756
- Nutrient absorption**
 - major elements, orange 8069
 - minor elements, orange 8069
 - nutrient solution, tomato 8774
 - review 7304
 - soil
 - amendments, tomato 8774
 - compaction, sugar cane 8212
- Nutrients**
 - absorption 3296
 - lunar materials, vegetables 4380
 - planting, apple 1773
 - application, fruit, apple, annual report, Belgium 902
 - content
 - determination, neutron activation analysis, *Datura* spp. 6293
 - fruit, grapevine 7595
 - fruiting, fruit trees and plants 5705
 - herbicides, pea, bean (*Phaseolus*), spinach 4485
 - molybdenum nutrition, pea 5273
 - nutrient solution, concentration, grapevine 6749
 - phosphorus nutrition, pea 5273
 - seasonal variations, citrus 3114
 - varietal variations, citrus 3114
- Nutrition**
 - deficiency 881
 - diagnosis 881
 - plant histology 5684
 - nitrogen 4090
 - plant
 - leaf
 - light
 - absorption, squash, annual report, USA 600
 - reflection, squash, annual report, USA 600
 - transmission, squash, annual report, USA 600
 - plant analysis, electron microprobe x-ray analyser 2490
 - requirements 881
 - studies, Soxhlet glassware technique 4921
 - toxicity, plant histology 5684
- Nutritional value**
 - amino acids, vegetables 3628
 - Benincasa hispida* 5944
 - date 7162
 - fatty acids, walnut 5069
 - nitrates, vegetables 606
 - organic acids, grapevine fruit 1894
 - plants, review, report, German Federal Republic 8284
 - proteins
 - beetroot 5172
 - pea 6018
 - sugars, grapevine fruit 1894
 - vegetables 4387
 - vitamins
 - beetroot 5172
 - grapevine fruit 1894
 - spinach beet 8596
- Nuts**
 - annual report, USA 25
 - nutrition, boron, deficiency 6499

Nuts contd.

- planting
 - high density, Switzerland 904
 - survey, Switzerland 904
- seed, oil, biosynthesis 3336
- varieties
 - Hungary, book 3355
 - register
 - Canada 5670
 - USA 5670

Oak

- annual report, Netherlands 4604
- planting, WANE system, roadside plants 3908

Oak leaf-mould, media constituent, physical properties 7291**Ochrosia vieillardii, alkaloids, content 2365****Ocimum basilicum, seed, mucilage, sugars 3034****O. canum, essential oil, fungicidal properties 6256****O. sanctum**

- leaf
 - extracts
 - for seed treatment 8011
 - for seedling treatment 8011
- medicinal properties 3974

O. spp.

- essential oil, nutrition, annual report, Sarawak 3933
- stomata, structure, development 5494

Odoiporus longicollis, banana pests 380**Odontoglossum spp.**

- diseases, ringspot, annual report, German Federal Republic 8837

- leaf, anatomy 4680

- pollinaria 312

Ocophylla spp., cacao pests, annual report, Ghana 7177**Oenothera spp.**

- flower, amino acid, biosynthesis, pollination 6998
- pollination, amino acid, biosynthesis 6998
- taxonomy 266

Oidium chrysanthemi, chrysanthemum diseases 6229**O. erysiphoides, f gerberae, gerbera diseases 2200****O. farinosum, apple diseases 5734****O. heveae**

- clonal susceptibility, rubber diseases 8182
- rubber diseases, book 6425
- seasonal susceptibility, rubber diseases 8182
- secondary leaf fall, prevention, rubber diseases 8183

O. mangiferae, mango diseases, annual report, India 4034**O. spp.**

- clonal resistance, rubber diseases 7222
- cucurbit 8305
- cucumber and gherkin diseases 160
- mango diseases 7203
- okra diseases 160

Oil

- fruit
 - avocado 359
 - Styrax officinalis*, composition 9067

seed

- grapefruit, composition 372
- tomato 253
- Torreya nucifera*, composition 2374
- Trichosanthes* spp., composition 2339
- watermelon, extraction 1184

- seeds, book 355

Oil palm

- annual report
 - Nigeria 9181
 - Sabah 9135
 - Sarawak 4036
- boron
 - content, leaf 7212
 - translocation 7212
- breeding and selection 1602
 - disease resistance, *Fusarium oxysporum*, f. *elaeidis* 8164
 - photosynthesis 9184
- cover crops
 - legumes 7209
 - management 6410

Oil palm contd.**cover crops contd.**

- Mikania* spp. 6410
- Pueraria phaseoloides* 7209
- drought, phosphorus, absorption 4071
- economics 9182
- growing
 - as an intercrop, cacao, annual report, Nigeria 4035
 - marginal land, Ivory Coast 2456
 - Papua New Guinea 7206, 7214
 - Sri Lanka 9183
 - Venezuela 1597
- growth studies, Papua New Guinea 7210
- harvesting, time of, oil content 2459
- herbicides
 - application, equipment 2457
 - injury
 - Daconate 1601
 - mixtures 8166
 - MSMA 4067
 - paraquat 4067
- phenolic compounds, content, root, disorder resistance, sudden dieback 6412

- phosphorus, absorption, drought 4071
- photosynthesis, seedling variation 9184

- planting, soil, preparation, windrowing 1599

- production and trade 9182

- West Africa 5634

- products and by-products, debris ash, as a fertilizer 9190

seedling

- production 8165
- nutrition 7211
- raising, plastic bags 7211
- selection 8165
- species, disorder resistance, sudden dieback 6412
- spraying, equipment 5639
- temperature 2456
- tissue culture
 - root 2458
 - shoot-tip
 - growth substances, treatment 1604, 6413
 - media 6413
- water relations 2456
- weed control 4067-4068, 4075, 8134, 8166

- cover crops 7209
- economics 2457
- Imperata* spp. 1600
- nurseries 1601
- review 8121

Oil palm diseases

- Fusarium oxysporum*, f. *elaeidis*, resistance, breeding and selection 8164
- Marasmius palmivorus*, control 6384
- various, Togo 5599

Oil palm disorders

- "marchitez" disease 9189
- sudden dieback
 - resistance
 - root composition 6412
 - root structure 6412
 - various, Togo 5599

Oil palm fruit

- drop, growth substances 2459
- oils, content, harvesting date 2459

Oil palm growth substances, fruit, drop 2459**Oil palm leaf**

- analysis, sampling, position 8167
- area, measurement 7207
- composition, genetic constitution 4069

Oil palm nutrition 864, 2463

- boron 1603
 - deficiency
 - control measures 9187
 - symptoms 1603, 3245
 - leaf analysis 7213
 - pest resistance, *Tetranychus pieroei* 6411
 - translocation 7213
- general
 - leaf analysis, sampling 8167
 - nurseries 7211
 - leaf analysis 4069
 - magnesium 3244, 4070
 - leaf analysis 7214

Oil palm nutrition contd.

- magnesium
 - contd.
 - review 4876
- manganese, leaf analysis 7214
- nitrogen 3244, 4070
 - leaf analysis 7214
 - review 4876
- phosphorus 3244, 4070
 - review 4876
- potassium 3244, 4070
 - review 4876
- sulphur
 - deficiency 841
 - leaf analysis 3173, 7214
- Oil palm pests 1696**
 - birds, control, review 4830
 - Cephaloleia* spp. 5637
 - Coelaenomenodera elaeidis* 5638
 - population studies 4877
 - insects, control, review 1532
 - monkeys 8168
 - Parasa pallida*, Ivory Coast 9188
 - P. viridissima*, Ivory Coast 9188
 - review, Malaya 5636
 - rodents 7170
 - Sagalassa valida* 9189
 - Tetranychus pieroei*, boron nutrition 6411
 - various, Togo 5599
- Oil palm propagation**
 - embryo, tissue culture 1605
 - shoot-tip, tissue culture 1604
- Oil palm root**
 - growth, tissue culture 2458
 - structure, disorder resistance, sudden dieback 6412
- Oil palm seed**
 - germination 9125
 - chamber 7208
 - water content 9185
 - water movement 9185
- Oil palm soil**
 - cultivation, weed control, sulphur deficiency 841
 - management, methods compared 6410
 - nutrients, Papua New Guinea 7211, 7214
 - types, Surinam 9186
- Oil palm varieties**
 - Africa 1598
 - comparative trials, Costa Rica 5635
- Oil plants, Indonesia 1674**
- Oils, book 355**
- Okra**
 - annual report 1935
 - India 3607
 - St. Lucia 8577
 - USA 4368, 8585
- carbohydrates
 - content
 - photoperiodism 8749
 - temperature 8749
- carbon dioxide, concentration, fruit, dehiscence 7466
- chlorophyll
 - content, diseased plants, yellow vein mosaic 6887
 - degradation, yellow vein mosaic virus 1259
- enzyme activity
 - diseased plants, yellow vein mosaic 6887
 - fruit, soil salinity 2838
 - leaf, soil salinity 2838
- flowering, date, growth substances 7758
- growing
 - as an intercrop
 - pineapple 9198
 - sugarcane 5650
 - harvesting, time of 234
 - hybrids, F₁ 2837
 - mulching, paper, plastic coated 8747
 - nematicides, translocation, Nema-cur 2394
 - nitrate, content, nitrogen nutrition 2091
 - nucleic acids, biosynthesis, soil salinity 2838
 - nutrient, absorption, soil, salinity 3773
 - photoperiodism 7756
 - carbohydrates, content 8749
 - flower bud, initiation 8749
 - pigments, content, diseased plants, yellow vein mosaic 6887

- Okra contd.**
 seedling, emergence, soil temperature 4447
 temperature 7756
 carbohydrates, content 8749
 flower bud, initiation 8749
- Okra diseases**
Erysiphe cichoracearum 160, 7757
Fusarium solani, seed-borne 4528
Leveillula taurica 160
Oidium spp. 160
Rhizoctonia solani 4529
Sphaerotheca fuliginea 160
Verticillium dahliae 387
 yellow vein mosaic
 host enzyme activity 6887
 host pigments, content 6887
 yellow vein mosaic virus, chlorophyll, degradation 1259
- Okra flower**
 bud initiation
 photoperiodism 8749
 temperature 8749
 sex, growth substances, 2,4-dichlorophenoxybutyric acid 1407
- Okra fruit**
 dehiscence
 carbon dioxide 7466
 ethylene 7465
 ethylene, production 7465
 proteins, content 4941
 quality, F₁ hybrids 2837
- Okra growth substances**
 application, methods, chlormequat 7758
 flower, sex, 2,4-dichlorophenoxybutyric acid 1407
 flowering, date, chlormequat 7758
 responses
 chlormequat 7758
 GA 7755
 MH 7755
- Okra nutrition**
 nitrogen 2091
 NPK 665
 economics 665
 phosphorus 2091
 potassium 2091
- Okra pests**
Aceria esculenti 8748
Radopholus similis 2394
Rotylenchulus reniformis 2394, 2460
Tylenchulus semipenetrans 2394
- Okra plant**
 composition 2091
 nitrogen nutrition 2091
 variation 5317
- Okra pod, number, mulching, paper, plastic coated** 8747
- Okra seed**
 germination
 photoperiodism 7756
 temperature 7756
 production 234
 sowing, dates, India 7756
 treatment, growth substances 7755, 7758
- Okra soil**
 salinity
 enzyme activity 2838
 nucleic acids, biosynthesis 2838
 nutrients, absorption 3773
 plant, tolerance 3773
 seedling emergence 4447
- Okra varieties**
 comparative trials, Pakistan 6886
 flower bud initiation
 photoperiodism 8749
 temperature 8749
- Oldenlandia affinis**, alkaloids, determination 8033
- Oleander**
 dwarfing
 growth substances 3932
 temperature 3932
 flavonoids 4727
 phenolic compounds 4727
 taxonomy, chemotaxonomy 4727
 temperature
 dwarfing 3932
 interaction, growth substances 3932
- Oleander growth substances**
 application
 foam, aminozone 7059
- Oleander growth substances contd.**
 application contd.
 surfactants, aminozone 7059
 dwarfing
 aminozone 3932
 chlormequat 3932
 interaction, temperature 3932
 retardants, aminozone 7059
- Oleander propagation, cuttings, treatment, growth substances, IBA** 7959
- Oligonychus afraasiaticus**, date pests 2416
- O. coffeae**
 control
 cucumber and gherkin pests 5222
 Cucumis melo var. *flexuosus*, pests 5222
- O. indicus**, control, sugar cane pests 8232
- O. mangiferus**, grapevine pests 3585
- O. pratensis**, *Cymbopogon* spp., pests 5495
- Oligosita** spp., parasite of, *Numicia viridis*, sugar cane 8241
- Olive**
 alkaloids 4824
 annual report, Italy 8050
 chilling requirements, flowering 9113
 enzyme activity
 bud, flower bud initiation 9112
 leaf, flower bud initiation 9112
 ethylene, production, growth substances, ethephon 2422
 flowering
 date, pollination, varietal differences 2419
 growth substances 9113
 inhibition, growth substances 9113
 fruiting
 phosphorus, content, leaf 8112
 proteins, content, leaf 8112
 genetics, review 6375
 growing, review 4026
 hail, damaged plants, pruning and training 4823
 harvesting
 chemicals to aid, review 4825
 fruit, loosening 6379
 mechanical 1522
 economics 2426
 fruit
 loosening 2426
 growth substances 1521, 7166, 9114
 review 2423
 pneumatic suction 819
 pruning and training 2425
 shakers 819, 1521, 2425, 6380
 vibrating comb 3167
 insecticides, residues, determination, monocrotophos 7302
 irrigation, fruit, ripening 2421
 landscaping 3164
 oil, amino acid, metabolism 8114
 as an ornamental plant 3164
 propagation, cuttings 2314
 parks 3164
 phenolic compounds
 content
 leaf
 flower bud initiation 9111-9112
 seasonal variations 9111
 phosphorus
 content
 leaf
 fruiting 8112
 seasonal variations 8112
 planting
 high density 4025
 oil, quality 2421
 spacing, root systems 4025
 pollination, flowering, date, varietal differences 2419
 products and by-products
 oil, quality, irrigation 2421
 pulp, as a fertilizer 1880
 proteins
 content
 leaf
 fruiting 8112
 seasonal variations 8112
 pruning and training
 disease control, *Pseudomonas savastanoi* 4823
 hail damaged plants 4823
 mechanical harvesting 1522, 2425
- Olive contd.**
 pruning and training contd.
 regeneration 4823
 regeneration, pruning 4823
 soilless culture, nutritional studies 4027
 sterols, choline, content 4954
 temperature, flower bud, initiation 818
 transpiration, antitranspirants, fruit, quality 2424
 water potential, plant, growth substance-induced fruit abscission 6378
 water relations
 anti-transpirants, growth substance-induced fruit abscission 6378
 leaf, fall 1519
 weed control, review 5591
- Olive bud, development, growth substances** 9113
- Olive diseases**
Cycloconium oleaginum 3166
 infection process 1518
Gloeosporium olivarium 3166
Macrophoma dalmatica 3166
 nurseries 8113
Pestalotia quepina 3166
Phomopsis omanthi 3166
Rosellinia necatrix 3166
- Olive disorders, nurseries** 8113
- Olive flower**
 bud initiation 817
 chilling requirements 818
 enzyme activity 9112
 phenolic compounds
 bud content 9112
 leaf content 9111-9112
- Olive fruit**
 abscission, growth substances 6378
 amino acids, content 9115
 drop 9114
 loosening 2426
 growth substances 1520, 6379, 7166, 9114
 ethephon 1521, 2422
 phenolic compounds, content 2427
 quality, transpiration 2424
 ripening 2426
- Olive growth substances**
 bud, development, NAA 9113
 ethylene, production, ethephon 2422
 flowering
 aminozone 9113
 inhibition
 abscisic acid 9113
 GA 9113
 fruit
 abscission, cycloheximide 6378
 injury, cycloheximide 6378
 loosening
 chlormequat 9114
 cycloheximide 1520, 7166
 dichloroacetate 9114
 ethephon 1521, 2422, 6379, 7166, 9114
 glycerine 9114
 moniodoacetate 9114
 2,4,5-T 9114
 leaf
 abscission, cycloheximide 6378
 drop
 cycloheximide 7166
 ethephon 7166
 residues, cycloheximide 1520
 responses, chlormequat, review 8310
- Olive leaf**
 abscission
 anatomy 5592
 growth substances 6378
 anatomy 3165
 drop, growth substances 7166
 fall, water relations 1519
- Olive nutrition** 4027
 general, leaf analysis 5681
 review 4026
- Olive pests** 1696
Dacus oleae
 parasites, *Opius concolor* 6377
 poisoned bait 7165
D. spp., protein bait mixtures 816
 nurseries 8113
Zeuzera pyrina 4028
- Olive plant, biology** 6375

Olive propagation

- cuttings
 - root, treatment, growth substances, IBA 8323
 - shoot, size 9110
 - treatment
 - growth substances 9110
 - IBA 2314
 - wounding 2314

Olive root, systems, planting, spacing 4025**Olive rootstocks**

- own-rooted plants compared 6376
- scion relationships 6376

Olive varieties

- Coratina 2420
- flowering, date 2419
- fruit, amino acids, content 9115
- oil, content, annual report, Tunisia 3981
- ornamental 3164
- register, USA 3356
- Tunisia 4155

Oliveranthus spp., growing, as pot plants, annual report, Canada 8836**Olpidium brassicae****vectors**

- cucumber systemic necrosis
 - cucumber and gherkin 4453
 - lettuce 4453
- tobacco necrosis, vegetables 8651

Oncidium spp.

- flower, colour, pollination 4681
- pollinaria 312
- pollination, flower, colour 4681

Oncobasidium theobromae, cacao diseases 3184**Onion****annual report**

- Australia 5882
- Austria 114
- Belgium 4363
- Canada 1944, 2734, 5883
- German Federal Republic 7599
- Irish Republic 1939
- Malawi 8580
- Netherlands 6772
- New Zealand 5152
- UK 598, 601, 1934, 3610, 3613, 4366, 5885, 8584
- USA 600, 1130, 3616, 3618, 4368, 7601

breeding and selection

- bulb
 - colour 5301
 - shape 2830
- disease resistance, *Peronospora destructor* 2830

bulb formation, growth substances, BA 1249

- cadmium, determination 4389
- carbohydrates, content, bulb 7754
- chlorophyll, content, seed treatment, gamma rays 8738

dormancy

- growth substances, endogenous 3772
- varietal differences 6885

enzyme activity

- bulb
 - dormancy 6885
 - flavonols, biosynthesis 2834
- nutrient deficiency diagnosis 1145
- root 3768
- seed, germination 2833

essential oil, analysis 1257**flowering**

- growth substances, chlormequat 3770
- inhibition, growth substances, MH 3770

- photoperiodism, temperature 602
- temperature, photoperiodism 602

fungicides, application, surfactants, CTP-Cu 6875**growing**

- India, in the rainy season 6874
- as an intercrop, sugar cane 8202
- media, compared 7605
- peat 7605
 - nutrition 7604
- tropics 664
- Tunisia 4369
- tunnels 1187, 3760
- plastic 5166

Onion contd.**harvesting**

- desiccation, chemical, neo-decanoic acid mixture 4526
- methods compared 7752
- time of 3760

herbicides

- bulb, composition, prometryne 7747
- injury 3761

- application time, Paxilon 6031

measurement

- chlorthal dimethyl, 1251
- difenoxuron, 1251
- VCS-438 6029

- residues, application, methods 1949
- tolerance, chlorthal dimethyl 5305

humidity, relative**disease incidence**

- bulb storage, onion 7753
- Peronospora destructor* 3763

insecticides

- persistence, soil 1255

residues

- arsenic 3329
- determination, chlorpyrifos 4142
- plant, lead arsenate 1951

irrigation 3308

- drip, water composition 8638
- flood, water composition 8638
- methods, disease incidence 3763
- recommendations 232
- salinity problems 4376
- sprinkler 116, 4376
- weed control 5305
- sub-surface, water composition 8638
- trickle 4376
- water, consumption 6884

lead

- determination 4389
- residues 4936

- light, artificial, sources compared, bulb, development 3767

- medicinal properties 5168

mulching

- paper 3762
- peat, herbicide injury 1251
- plastic 3762
- weed control 7748

- mycorrhiza, relationships 6880
- nucleic acids, biosynthesis 5314

- nutrient absorption 2082

- nutrients, content 5890

- packing, damage 7307

- pectins, content, bulb skin 8745

photoperiodism

- bulb --

- development 3767
- initiation 2832

- ethylene 2086

- ripening 2832

- flowering 602

- pigments, content, seed treatment, gamma rays 8738

- planting 6027

- material 6027

- spacing 6878

- annual report, Rhodesia 4364

- irrigation 232

- nitrogen nutrition 8739

- seed production 7746

pollination**bees**

- nectar potassium content 2088
- seed production 5899

processing**dehydration**

- varietal behaviour 1248
- varieties 5303

proteins

- content, varietal differences 231
- determination, electrophoresis 4384

rainfall

- disease incidence, *Alternaria* spp. 5166
- protection, plastic 5166

- report, Sri Lanka 2733

- respiration, bulb, heat production, storage 1148

seedling

- emergence, nematicides, dazomet 1254
- growth, inhibition, *Coronilla varia* seed 7625
- leachate 7625

raising

- pots 3759, 6027

Onion contd.**seedling contd.****raising contd.****pots contd.**

- economics 3759
- set, treatment, fungicides 6875
- shade, disease incidence, *Peronospora destructor* 4523

- stomata, mechanism, temperature 1250

storage 5315

- buildings 2835
- disorders 3771

- firmness, measurement 8744

growth substances

- aminozide 4524

- endogenous 3772

- ethephon 4524

- MH 4524

- shoot growth, annual report, Cyprus 3604

- irradiation, gamma rays 1256
- methods compared 2835

quality

- evaluation 8744

- seed treatment, gamma rays 8738

- relative humidity 7753

- respiration, heat production 1148

- review 2090

- root, growth, growth substances 3769
- rots 7753

- harvesting methods 7752

- sugars, content 5304

- temperature 3771, 7753

- tropics 664

- weight loss, harvesting methods 7752

- sugars, content, latitude 5678

temperature**disease incidence**

- bulb storage 7753

- Peronospora destructor* 3763, 4523

flowering 602

- stomata, mechanism 1250

- transpiration, evapo- 6884

- transport, damage 7307

- water relations 6884

- weed control 1947, 3761, 5305, 5680, 6024, 6028-6031, 7747-7748, 8740

annual report

- Australia 7596

- German Federal Republic 8579

- review 5306

- weeds, competition 6879, 7748

- winter hardness, sugars, content 7662

Onion bulb

- cell, size, herbicides, injury 1251

- colour, genetics 5301

composition

- determination 8744

- harvesting methods 7752

- herbicides 7747

- processing, dehydration 1248

- protein 231

development

- light 3767

- photoperiodism 3767

- drying, methods 2835

- firmness, measurement 8744

- flavonols, biosynthesis 2834

- heat treatment 1690

initiation

- ethylene, photoperiodism 2086

- growth substances, ethephon 2086

- photoperiodism 2832

- ethylene 2086

irradiation**gamma rays**

- post-harvest 4527

- composition 1256

- storage life 1256, 3771

- peruvic acid, content, varietal differences 1248

quality

- harvesting methods 7752

- seed sowing

- dates 2836

- spacing 2836, 3760

ripening

- latitude 5678

- photoperiodism 2832

Onion bulb *contd.*

- scales
- cell
- water permeability
- growth substances
- aminozide 4524
- decenylsuccinic acid 5313

size

- growth substances, MH 3770
- seed sowing rate 6877
- vitamin, treatment 233

skin, pectins 8745

- sugars, content, storage 8744
- sulphur, content, irradiation, gamma rays 1256

- treatment, haemagglutinin, root development 2798

- water, content, irradiation, gamma rays 1256

Onion diseases

- Alternaria* spp., incidence, Nigeria 5166
- Botrytis cinerea*, varietal resistance 8737
- Fusarium oxysporum*
 - f. *cepae*, soil, inoculum 2831
 - seed treatment 6875
 - set treatment 6875
- Peronospora destructor* 3763
 - control 5312
 - host nutrition 663
 - resistance, breeding and selection 2830
 - temperature 4523
- P. schleidenii* 2084
- Pseudomonas cepacia* 6883
 - histology 5311
 - infection process 5310
- P. syringae* 2083
- Pyrenochaeta terrestris*, varietal resistance 1253
- Sclerotium cepivorum*, annual report, UK 8583
- Urocystis magica*, control 7751
- U. spp.*, annual report, Canada 3603
- yellow dwarf
 - control, cultural methods 6882
 - cytology 6033
 - seed-borne 6881

Onion disorders, bud darkening 3771**Onion flower**

- stem
 - development, growth substances, ethephon 4525
 - length, growth substances, ethephon 4525
- temperature 1250

Onion growth substances

- bulb
 - initiation, ethephon 2086
 - size, MH 3770
 - storage
 - dormancy
 - aminozide 4524
 - ethephon 4524
 - MH 4524
 - root growth, MH 3769
 - shoot growth, MH, annual report, Cyprus 3604
 - bulblet formation, BA 1249
 - cell
 - water permeability
 - aminozide 4524
 - decenylsuccinic acid 5313
 - endogenous, bulb 3772
 - flower stem
 - development, ethephon 4525
 - length, ethephon 4525
 - flowering
 - chlormequat 3770
 - inhibition, MH 3770
 - injury, MH 3770
 - responses
 - IAA 8743
 - IBA 8743
 - NAA 8743
 - seed
 - germination, ethephon 4525
 - production, ethephon 4525

Onion leaf

- sugars, content, seasonal variations 7662
- temperature 1250

Onion nutrition

- boron, copper nutrition 7750
- copper 7750
 - boron nutrition 7750

Onion nutrition *contd.*

- manganese, application, seed 7773
- molybdenum 6032
- nitrogen 8741
 - plant analysis 2081
 - planting, spacing 8739
- NPK 118, 1252
 - requirements 7749
- phosphorus 6032, 8741
 - absorption 5307-5309
 - mycorrhiza relationships 6880
 - plant analysis 2081
- potassium 6032, 8741
 - plant analysis 2081
- sulphur 8741

Onion pests

- Aceria tulipae* 228
- Ditylenchus dipsaci* 1254, 3317, 3878
 - annual report
 - Irish Republic 6770
 - UK 5153
- Hylemya antiqua* 1255
 - control 8742
- Liriomyza langei* 5298
- Meloidogyne hapla* 2761
- M. incognita* 3764
- M. javanica* 3764
- M. spp.*, soil fumigation 7801
- M. thamesi* 3764
- Pratylenchus brachyurus* 3764
- Tetranychus telarius* 228

Onion root

- absorption 230
- exudate
 - composition 3766
 - osmotic pressure 3765
 - soil, micro-organisms, control, *Verticillium dahliae* 2085
- growth 1147
- histology 230

Onion scape, temperature 1250**Onion seed**

- germination
 - enzyme activity 2833
 - growth substances, ethephon 4525
 - irrigation 4376
 - temperature 2093-2094
- production
 - bulb treatment 2089
 - disease incidence 6882
 - growth substances, ethephon 4525
 - NPK, nutrition 663
 - planting, spacing 7746
 - pollination, bees 5899
 - spacing 663
- sowing
 - dates 2836, 5303
 - Bulgaria 5304
 - disease incidence 3763
 - pelleted 6876
 - depth, pelleted 6876
 - mechanical, equipment 6939
 - rate 6877
 - row direction, disease incidence 3763
 - spacing 2836, 3760
 - annual report, German Federal Republic 7600
 - disease incidence 3763
 - storage, annual report, UK 3612
 - sugars, content 8883
 - treatment
 - boron, manganese, zinc, copper, molybdenum 6078
 - capsicum fruit extract 2093-2094
 - fungicides 3622, 6875
 - carboxin + thiram 7751
 - gamma rays 8738
 - hydrophobic compounds 6025-6026
 - manganese 7773
 - pelleted 6876

Onion seedling, vitamin, treatment 233**Onion soil**

- fumigation, *Meloidogyne* spp., thiazone 7801
- moisture 8741
- sampling, methods, microvolumes 9

Onion varieties 5303

- annual report
 - UK 5149
 - Western Samoa 7602
- Bulgaria 5304
- comparative trials
 - annual report, St. Lucia 8577

Onion varieties *contd.*

- comparative trials *contd.*
 - India 231
- disease incidence, *Botrytis cinerea* 8737
- disease resistance, *Pyrenochaeta terrestris* 1253
- India 6874
- photoperiodism 2832
- Plant Atjar 4522
- processing 1134
 - dehydration 1248, 5303
 - pickling 5302
- spring planting, New Mexico 1247
- storage behaviour 2836
- USSR 1942

Onion, welsh

- nitrite, toxicity 5893
- proteins, determination, electrophoresis 4384

Onion, welsh, diseases

- Erwinia carotovora*, varietal resistance 6034
- Pseudomonas syringae* 2083

Onion, welsh, plant, morphology 5316**Onion, welsh, varieties**

- disease resistance, *Erwinia carotovora* 6034
- Java 6034

Ootetrastichus beatus, parasite of, *Numicia viridis*, sugar cane 8241**Operophtera brumata**, apple pests, annual report, Netherlands 5698**Ophiobolus graminis**

- control, lawns and sports turf, diseases 8918
- lawns and sports turf, disease 4671

Ophiopogon spp., taxonomy, cytotoxicity 3905**Ophonus rufipes** 2703**Opius concolor**, parasite of, *Dacus oleae*, olive 6377**Opuntia spp.**

- diseases, witches'-broom 1373
- edible fruits 822
- fatty acids, content 1527
- fruit
 - composition, fatty acids 1527
 - indicaxanthin, biosynthesis 5595

Orange

- aerial spraying, insecticides, *Trioza erytreae* 4805

annual report

- Australia 4782, 9074
- Cyprus 3980
- USA 2375

- ascorbic acid, content, coloured light 7149

- boron, absorption 6342-6343

- breeding and selection 3098
- interspecific hybridization 5545

calcium

- absorption 6342-6343
- content, fruit, disorders 5556

carbohydrates

- content
 - disease resistance 3131
 - frost resistance 3131

chlorophyll

- content
 - coloured light 7149
 - iron nutrition 8075
 - plant nutrition 9100

climate

- California
 - fruit composition 8099
 - fruit flavour 8099
 - fruit size 8099
- Israel 1472
- microclimate 1472

- copper, absorption 6342-6343

cuticle

- structure
 - fruit 5571
 - leaf 5571

enzyme activity

- fruit abscission layer
 - growth substances 8085
 - cycloheximide 2405
- leaf, coloured light 7149

essential oil

- content, virus incidence, stubborn 6345
- fungicidal properties 6256

Orange contd.

- ethylene
 - fruit
 - abscission 4009
 - pigments 4814
 - production
 - fruit, storage 3152
 - growth substances, abscisic acid, IAA, kinetin, GA 2069
 - treatment, fruit, limonin, content 5576
- flowering
 - date, forecasting, temperature sums 2379
 - planting, spacing 3105
 - secondary, prevention 8092
- frost
 - protection, temperature data 6335
 - resistance 3101
 - carbohydrates, content 3131
 - nitrogen, content 3131
 - polyploids 7129
- fruiting, date, forecasting, temperature sums 2379
- fungicides
 - application
 - methods compared, thiabendazole, benomyl 6362
 - wax coatings, thiabendazole, benomyl 6362
 - persistence, benomyl 9099
 - residues
 - determination
 - benomyl 6501
 - captafol 2505
 - captan 2505
 - folpet 2505
 - thiabendazole 4019, 6501
 - fruit
 - benomyl 1698, 9099
 - biphenyl 9107
 - phenylphenol 9107
 - thiabendazole 4019
 - translocation, benomyl 9099
- growing, Mozambique 360
- harvesting
 - fruit
 - loosening, chemical 4011
 - size 6359
 - mechanical
 - fruit, loosening, growth substances 3148
 - shakers 4011, 4013
 - time of, fruit composition 6366
- herbicides
 - injury, GS-14254 8065
 - persistence, GS-14254 8065
 - tolerance
 - nitralin 8065
 - R-7465 8065
- hybrids, interspecific 5545
- insecticides
 - oil, fruit, colour 5564
 - residues
 - arsenic 3329
 - determination
 - chlorpyrifos 4142
 - monocrotophos 7302
 - fruit, methomyl 2507
- iron, absorption 6342-6343
- lactones 6367
- lead, residues 4936
- light
 - coloured
 - enzyme activity 7149
 - leaf, composition 7149
 - shoot, growth 7149
- magnesium, absorption 6342-6343
- manganese, absorption 6342-6343
- nitrate, content, NPK nutrition 2384
- nitrogen
 - absorption 6342-6343
 - content
 - disease resistance 3131
 - frost resistance 3131
 - metabolism, photoperiodism 8754
- nutrient absorption
 - major elements 8069
 - minor elements 8069
 - nutrient solution composition 7135
 - packing, fruit weight loss 7151
- phenolic compounds, content 4802
- phosphorus, absorption 6342-6343

Orange contd.

- photoperiodism, nitrogen, metabolism 8754
- photosynthates, translocation, fruit set 6357
- photosynthesis, plant nutrition 9100
- planting
 - anti-transpirants 6355
 - spacing 3105
- pollination, pollinating varieties 8090
- as a pollinator, tangor 9102
- polyembryony 9079
- potassium
 - absorption 6342-6343
 - content
 - leaf
 - copper nutrition 9087
 - iron nutrition 9087
 - manganese nutrition 9087
 - nitrogen nutrition 9087
 - zinc nutrition 9087
- products and by-products
 - essential oil
 - aldehydes, content 1511
 - extraction 1511
 - juice
 - characterization, amino acids, composition 1508
 - fatty acids 806
 - limonin, content 5576
 - phospholipids 806
 - pulp, animal fodder 5580
- proteins
 - content
 - bud, growth substances 8089
 - leaf, growth substances 8089
- pruning and training, regeneration 5553
- regeneration
 - pruning
 - fruit, size 5553
 - topworking compared 5553
- respiration
 - ethylene, production 383
 - fruit, gamma rays 1504
- ringing
 - fruit
 - drop 4807
 - size 4807
 - growth substances, endogenous 4807, 8083
 - time of, fruit, size 4006
- silicon, determination, colorimetric 7287
- spraying, precipitants, residues 9086
- stomata, structure 5571
- storage
 - controlled atmosphere
 - fruit
 - composition 9104
 - enzyme activity 9104
 - flavour 9104
 - respiration 9104
 - dips
 - disease control
 - Diplodia* spp. 6362
 - Trichoderma* spp. 6362
 - plastic bags 3150
 - rots, coatings 1506
 - temperature
 - disease incidence 1506
 - fruit
 - colour 5573
 - composition 5573
 - temperature
 - fruit, pigments 4814
 - sums, disorder incidence 807
 - topworking 5553
 - transport
 - containers, compared 1507
 - pre-cooling, temperature, container-4016
 - vitamins, content 3339
 - water potential, leaf, soil water correlations 6356
 - water relations, fruit, size, diurnal changes 3140
 - weed control 1947, 4790, 8065
 - weeds, competition 8066
 - wind, damage 1474
 - zinc, absorption 6342-6343
- Orange bud, proteins, content 8089**
- Orange diseases**
 - Alternaria citri*, fruit storage 5574
 - collar rot, cause unknown 362

Orange diseases contd.

- Colletotrichum gloeosporioides* 7143
- concave gum psoriasis, interaction, disease resistance, *Deuterophoma tracheiphila* 4802
- Curvularia tuberculata* 7143
- Deuterophoma tracheiphila* 365
 - resistance, virus interaction 4802
 - varietal resistance 3131
- Diplodia natalensis* 4810, 7143
- D. spp.*, post-harvest dips 6362
- exocortis 5547
 - detection, chromatography 4796
 - incidence 5558
 - interaction, disease resistance, *Deuterophoma tracheiphila* 4802
- Fusarium* spp. 5563
 - incidence 6327
- greening, detection, chromatography 4796
- greening virus 1487
- infectious variegation, interaction, disease resistance, *Deuterophoma tracheiphila* 4802
- Mycosphaerella citri* 3127
- M. spp.* 3132
- Penicillium digitatum* 4810, 9099
 - post-harvest dips 4811
- P. spp.* 7155
- Phytophthora* spp., host amino acids, content 2393
- psoriasis virus 1486
- stubborn, essential oil, content 6345
- stubborn disease 2391
- Trichoderma* spp., post-harvest dips 6362
- Orange disorders**
 - chlorosis 8075
 - zinc nutrition 3121
 - creased fruit 2414
 - creasing 4793, 5556
 - granulation 807, 4794
 - sand hill decline 3123
 - storage spot 4812
 - young tree decline 3123
- Orange flower**
 - bud initiation
 - growth substances 8089
 - varietal differences 9101
 - nectary, structure 8009
- Orange fruit**
 - abscission
 - ethylene 4009
 - ethylene production 2406
 - growth substances
 - cycloheximide 2406, 4009
 - 2,4-D 2406
 - ethephon 2406, 4009
 - removal force, seasonal variations 4009
 - abscission layer, enzyme activity, growth substances 8085
 - alcohols, content, storage 9104
 - amino acids, content 7157
 - ascorbic acid
 - content
 - climate 6334, 8099
 - iron nutrition 8075
 - seasonal variations 8099
 - storage 5573
 - colour
 - climate 6334, 8099
 - growth substances, ethephon 2407
 - insecticides, oil 5564
 - seasonal variations 8099
 - composition 5575, 7157
 - calcium nutrition 370
 - climate 6334, 8099
 - creased fruit 2414
 - growth substances, GA 1500, 4007
 - harvesting date 6366
 - magnesium nutrition 370
 - nitrogen nutrition 1479, 7159
 - nutrition 1478
 - plant nutrition 8069
 - rootstocks 4788
 - seasonal variations 8099
 - coumarins, content 8446
 - degreening
 - disease incidence
 - Diplodia natalensis* 4810
 - Penicillium digitatum* 4810
 - ethylene 4810

Orange fruit *contd.*degreening *contd.*

- growth substances, ethephon 2409
- room design 4015
- temperature 4015

development, growth substances GA 1500

drop

- growth substances 3144, 8091
- potassium nutrition 3115
- ringing 4807

ethylene

- production
 - growth substances 3148
 - cycloheximide 2405

flavonoids 8102

flavour

- climate 6334, 8099
- nitrogen nutrition 7159
- seasonal variations 8099
- storage, controlled atmosphere 9104
- folic acid 4816

fumigation

- ethylene, production, ethylene dibromide 3152

residues, ethylene dibromide 3152

hydrocarbons, content, varietal differences 8100

injury

- growth substances 5572
- resistance 9103

irradiation

- gamma rays, mechanical injury resistance 9103

ionizing

- disease control 604
- injury, tainting 604

-leaf relationships, fruit set 6357

limonin, content, growth substances, ethephon 5576

loosening

- growth substances 5572
- aminozide 3148
- cycloheximide 2405, 3147-3148, 4010-4011

ethephon 2407

organic acids 4011

maturity, colour, juice content 3159

nutrients, content 3157

organic acids

- content 7157
- seasonal variations 4020

peel

- thickness
 - calcium nutrition 370
 - climate 8099
 - nitrogen nutrition 1479
 - seasonal variations 8099

pigments

- biosynthesis, ethylene, temperature 4814
- metabolism 4005

post-harvest treatment, gamma rays, respiration 1504

proteins, content 4941

quality

- calcium nutrition 3118
- nitrogen nutrition 7159
- nutrition 3115
- potassium nutrition 805
- soil, pH 3118

ripening, propylene treatment 383

set

- growth substances 8091
- GA 1500-1501, 4007
- planting, spacing 3105

shape, growth substances, GA 1500

size

- calcium nutrition 370
- climate 6334, 8099
- diurnal changes, water relations 3140
- growth substances 8091
- GA 1500-1501
- harvesting 6359
- nitrogen nutrition 1479
- NPK nutrition 3993
- nutrition 1478
- pollination 4808
- pruning and training, regeneration 5553
- ringing 4006, 4807
- seasonal variations 8099
- seed, number per fruit 4808

Orange fruit *contd.*size *contd.*

storage quality 5573

sugars

- content 7157
- seasonal variations 4020

wax coatings 3154

injured fruit 3154

mechanical injury resistance 9103

weight, loss, handling 7151

Orange growth substances

absorption

foliar

- abscisic acid 2885
- 2,4-D 2885
- NAA 2401, 2885

disease incidence, 2,4-D 1506

endogenous, ringing 4807, 8083

enzyme activity

cycloheximide 2405

fruit abscission layer, cycloheximide 8085

ethylene

production

- abscisic acid 2069
- cycloheximide 2405, 3148
- GA 2069
- IAA 2069
- kinetin 2069

fruit

abscission

cycloheximide 2406, 4009

2,4-D 2406

ethephon 2406, 4009

colour, ethephon 2407

composition, GA 1500, 4007

degreening, ethephon 2409

development, GA 1500

drop

2,4-D 3144, 8091

NAA 3144

2,4,5-TP 3144

2,4,5-T 3144, 8091

GA 1501

injury

cycloheximide 3148, 4010, 5572

erythorbic acid 5572

hexamic acid 5572

limonin, content, ethephon 5576

loosening

aminozide 3148

cycloheximide 2405, 3147-3148, 4010-4011, 5572

erythorbic acid 5572

ethephon 2407

hexamic acid 5572

set 1501

2,4-D 8091

GA 1500, 4007, 8091

2,4,5-T 8091

shape, GA 1500

size 1501

2,4-D 8091

GA 1500

leaf

abscission

cycloheximide 2406, 3147, 5572

2,4-D 2406

erythorbic acid 5572

ethephon 2406

proteins, content, GA 8089

translocation, NAA 2401

Orange leaf

abscission

ethylene production 2406

growth substances 5572

cycloheximide 2406, 3147

2,4-D 2406

ethephon 2406

amino acids

content

disease incidence 2393

soil, oxygen concentration 2393

chlorine, content, wind damage 1474

composition

calcium

magnesium nutrition 7135

potassium nutrition 7135

cations, nutrient absorption 7135

magnesium

calcium nutrition 7135

potassium nutrition 7135

mineral elements 1484

Orange leaf *contd.*composition *contd.*

potassium

calcium nutrition 7135

magnesium nutrition 7135

cuticle, growth substances, absorption 2885

ethylene, production 2406

fall, copper nutrition 4791

-fruit relationships, fruit set 6357

growth phases, nitrogen metabolism 8754

nitrogen

content

- manganese nutrition 1481
- zinc nutrition 1481

nutrients

content

- seasonal variations 3114
- varietal variations 3114

proteins, content 8089

sugars

content

- manganese nutrition 1481
- zinc nutrition 1481, 1481

transpiration, antitranspirants, persistence, Pinolene 6354

Orange nutrition 3115

calcium 3115, 7135

fruit

quality 370, 3118

size 1478

leaf analysis 1478

photosynthesis 9100

zinc nutrition 8073

copper

application

foliar 4791

injury 4791, 9086

precipitants 9086

residues 9086

fruit, composition 1478

leaf, potassium content 9087

leaf analysis 1478

FYM 9087

photosynthesis 9100

general, chlorophyll, content 9100

green manures 9087

interaction, cations 7135

iron

absorption 3997

leaf, sources 3997

application, foliar 3997

chlorosis 8075

fruit, composition 8075

leaf

chlorophyll, content 8075

potassium content 9087

sources, chelates 3119

translocation 3997

leaf analysis 796

magnesium 3115, 7135

application, foliar 1485

deficiency 1485

fruit

composition 1478

quality 370

leaf analysis 1478, 1485

sources, compared 1485

manganese

application

foliar 1481-1482, 4791, 6342-6343

precipitants 9086

residues 9086

fruit, quality, juice content 6342-6343

leaf, potassium content 9087

minor elements 3115

nitrogen

application, foliar 3993, 6342-6343

fruit

composition 1478, 7159

flavour 7159

quality 7159

juice content 6342-6343

size 1478

leaf analysis 1478, 2384

photosynthesis 9100

sources, compared 1479, 9087

NPK 3157

pest resistance, scale insects 2397

photosynthesis 9100

phosphorus 3115

application, foliar 3993

Orange nutrition contd.

- phosphorus contd.
 fruit, composition 1478
 leaf, composition 2384
 leaf analysis 1478
 plant analysis 5555
 potassium 3115, 3117, 7135
 application
 foliar 3993
 time 3995
 fruit
 composition 1478
 quality 805
 size 1478
 leaf, composition 2384
 leaf analysis 1478
 sewage sludge, photosynthesis 9100
 soil analysis 796
 soil uniformity restoration, post-experiment 3994
 sulphur 3115
 zinc
 application
 foliar 1481-1482, 4791, 6342-6343
 precipitants 9086
 residues 9086
 methods compared 7138
 availability 8073
 calcium nutrition 8073
 deficiency, chlorosis 3121
 fruit
 composition 1478
 quality, juice content 6342-6343
 leaf, potassium content 9087
 leaf analysis 1478
 sources
 compared 8073
 fruit, quality 3121
 nutrient absorption 3121

Orange pests

- Aceria sheldoni* 9095
 control 7145
Aonidiella aurantii 5564
 oil fruit dips 1493
 parasites, *Aphytis melinus* 1495
 resistance 3134
 NPK nutrition 2397
Ceratitis capitata, poisoned bait 7165
C. spp., protein bait mixtures 816
Chrysomphalus ficus 7147
Lepidosaphes beckii 7147
 resistance, NPK nutrition 2397
 mites, biological control 366
Panonychus citri 5564
 aerial spraying 8079
Phyllocoptruta oleivora 6349
 control 8080
Trioza erytraea, aerial spraying 4805
Tylenchulus semipenetrans 2395

Orange propagation

- cuttings
 root, treatment, growth substances, IBA 8323
 time 3986
 treatment, growth substances, IBA 3986
 nucellus, embryo, tissue culture 6333

Orange rootstocks

- citrange 5547
Citrus macrophylla 8063
C. wilsonii 4788
 comparative trials 795
 USA 8063
 lime (*Citrus*), review 3102
Poncirus trifoliata 3101, 5547
 -scion relationships
 frost resistance 3101
 fruit
 composition 4788
 juice content 6342-6343
 size 6342-6343
 leaf, composition 1484
 nutrient absorption 6342-6343

Orange seed, number per fruit, fruit, size 4808**Orange soil**

- oxygen concentration, plant amino acids, content 2393
 pH, fruit, quality 3118

Orange, sour

- as a rootstock
 disease resistance, grapefruit 9092
 grapefruit 5559, 6332

Orange, sour contd.

- as a rootstock contd.
 orange 795
Orange, sweet
 as a rootstock
 citrus 3988
 orange 795
Orange varieties
 comparative trials, annual report, Burundi 4786
 disease resistance, *Deuterophoma tracheiphila* 3131
 disorder incidence 807
 disorder resistance, creasing 5556
 frost, resistance, leaf, composition 3131
 fruit
 folic acid 4816
 hydrocarbons, content 8100
 leaf, composition, seasonal variations 3114
 Navelate 5547
 pollination 8090
 Sladkii 3098
Orchard renewal
 frameworking
 apple 4157
 cherry 4157
 methods compared, fruit trees and plants 4157
Orchids
 air pollution, sulphur dioxide, ethylene, injury 6132
 annual report
 Belgium 5386
 USA 1441, 6129
 chlorophyll, biosynthesis, growth substances 7029
 compost, amendments, plastic foam 8850
 growing, as pot plants 8936
 growth substances
 chlorophyll, biosynthesis, orthochlorophenoxyacetic acid 7029
 pigments, biosynthesis, orthochlorophenoxyacetic acid 7029
 hybrids, sterility 8934
 mycorrhiza 5459
 relationships 310
 nutrition, annual report, German Federal Republic 7844
 pigments, biosynthesis, growth substances 7029
 plant, histology, tissue preparation 6208
 propagation
 meristem, tissue culture, transplanting, media 8774
 shoot-tip culture 1380
 seed, germination 7936
 seedling, growth 7936
 tissue culture
 callus
 chlorophyll, biosynthesis 7029
 pigments, biosynthesis 7029
Organic acids
 biosynthesis
 fruit, *Aspergillus varicolor*, litchi 8110
 pea 7739
 stomata, mechanism, bean (*Vicia*) 3724
 content
 fruit
 berry fruits 101
 citrus 7157
 Citrus spp. 7157
 drought, mandarin and tangerine 8093
 Phytophthora citrophthora, lemon 6347
 ripening, banana 8126
 iron nutrition, tomato 7789
 leaf, vegetables 8594
 ripening, pea seed 5290
 seasonal variations
 ornamental trees and shrubs 4163
 tree fruits 4163
 varietal differences, pea seed 5290
 determination
 fruit, grapevine 7593
 liquorice 8024
 vegetables 5901

Organic acids contd.

- metabolism
 enzyme activity, *Kalanchoe* spp. 8926
 mushroom 7839
 photoperiodism, *Kalanchoe* spp. 8926
Origanum glaucum, essential oil, composition 3949
O. majorana
 essential oil, content, varietal differences 7976
 flower, essential oil, content 7976
 leaf, essential oil, content 7976
 stem, essential oil, content 7976
 varieties
 essential oil, content 7976
 growth studies 7976
O. spp.
 essential oil 4738
 phenolic compounds 3035
Orius insidiosus, predator on, *Panonychus ulmi*, apple 4213
Ornamental palms
 flower, perianth aestivation 4831
 seed, germination 9125
Ornamental plants 2244
 acaricides, tolerance 2173
 air pollution, injury, peroxyacetyl nitrate, nitrogen oxides 4130
 alkaloids, content 2346
 amino acids, content 449
 annual report
 Belgium 5386
 German Federal Republic 6959
 Netherlands 6127
 UK 867
 axillary bud, meristem, anatomy 2912
 book, Ghana 2911
 breeding and selection, review, India 8840
 bulb, morphology 4613
 carbon dioxide, concentration, tolerance 6782
 chromosome numbers 1318-1319
 collection, USSR 2157
 conference 6211
 corm, morphology 4613
 diseases 3319
 review, USSR 2162
 South Africa 2172
 dwarfing, growth substances 4610
 flower
 colour, latitude 5678
 harvesting, mechanical, annual report, Netherlands 1314
 fluorine, toxicity 4130
 fungicides, tolerance 2173
 growing
 book 6476
 in containers, weed control 8851
 under glass
 economics 4122
 Netherlands 4122
 India 8840
 media, annual report, Italy 6960
 growth substances
 application, surfactants, chlormequat 8842
 metabolism, indole3-acetaldoxime 5898
 retardants, ancymidol 1326
 herbicides
 injury 5392
 tolerance 2173
 pronamide, chlorpropham 6779
 Indonesia 1674
 insecticides, tolerance 2173
 irrigation
 recommendations 1324
 water
 composition
 boron 5163
 chlorine 5163
 sodium 5163
 light, quality, spectral, latitude 5678
 nutrition 2160
 boron, deficiency 6499
 general, colloquium 6479
 nitrogen 6963
 phosphorus 6963
 potassium 6963
 ozone, injury 4130

Ornamental plants *contd.*

- pests
 - biological control, *Bacillus thuringiensis* 447
 - Meloidogyne incognita*, resistance 4615
 - M. javanica*, resistance 4615
 - M. spp.* 4931
 - nematodes 446
 - Pratylenchus penetrans*, resistance 4615
 - slugs 1329
- photoperiodism, latitude 5678
- photosynthesis, gas exchange ratio 2915
- potting composts, types compared, nutrient availability 6963
- production, economics, Aalsmeer 705
- propagation
 - cuttings, soil, temperature 3897
 - grafting, methods, tropics 875
 - under mist 5677
- rhizome, morphology 4613
- seed
 - germination, harvesting time 8874
 - oil, biosynthesis 3336
 - size, harvesting time 8874
- seedling, growth, soil, temperature 3897
- shoot, morphology 4613
- soil
 - aeration, amendments 709
 - amendments
 - hydrophobic polystyrene foam 709
 - hydrophilic urea-formaldehyde-foam resin 709
 - plastic foam 709
 - water-soluble polymers 709
 - types, nutrient availability 6963
- spring-flowering, book 6125
- sulphur dioxide, injury 4130
- temperature, latitude 5678
- tuber, morphology 4613
- value
 - aesthetic 1316
 - functional 1316
- water relations, review 1324
- weed control 1681, 4924
 - annual report, USA 1315
 - survey 5392
- wild, Crimea 862
- Ornithogalum spp.***, seed, sugars, content 8883
- Orbanche spp.***
 - control
 - bean (*Vicia*) 4488
 - growth substances, watermelon 5210
 - watermelon 8648
- Orosius argentatus***, mycoplasma, vectors, legume little leaf 278
- Oroxylum spp.***, bark, composition, flavonoids 6304
- Oryctes rhinoceros***, coconut pests 2444
- Oscinella frit***, lawns and sports turf, pests 2973
- Osmia cornifrons***, pollinator, apple 1780
- Osmotic pressure**, cell sap, measurement, equipment 4919
- Osteospermum fruticosum***, ground cover plants, growth retardants 6157
- O. spp.***
 - ground cover plants 710
 - weed control 710
- Ostrachoderma spp.***, soil steaming, mushroom diseases 6956
- Ostrinia nubilalis***, capsicum pests 3777, 4540
- Otiorrhynchus asphaltinus***, grapevine pests 1923
- O. sulcatus***, strawberry pests 5818
- Ovulinia azaleae***, azalea diseases, annual report, Australia 5385
- Oxalis cernua***, as weeds, carnation 2921
- Oxalis corniculata***, as weeds, rose 6226-6227
- Oxygen**, translocation, pea 1233
- Ozone**
 - cell permeability, bean (*Phaseolus*) 8682
 - injury 4130
 - bean (*Phaseolus*) 6840
 - bedding plants 1322
 - annual report, Canada 8836
 - grapevine 6728

Ozone *contd.*

- injury *contd.*
 - leaf
 - composition, adenylates, bean (*Phaseolus*) 6841
 - ethylene production, bean (*Phaseolus*) 4483
 - metabolism, bean (*Phaseolus*) 2015
 - photosynthesis, bean (*Phaseolus*) 8681
 - poinsettia 3916
 - respiration, bean (*Phaseolus*) 1209, 8681
 - petunia 4633
 - pollen, petunia 1340
 - prevention
 - fungicides
 - bean (*Phaseolus*) 1210-1211
 - benomyl, bean (*Phaseolus*) 6840
 - growth substances
 - petunia 6152
 - poinsettia 8946
 - sulphur nutrition, bean (*Phaseolus*) 2788
 - varietal resistance
 - lettuce 5178
 - petunia 6152
 - radish 5178
 - spinach 4392
 - tomato 673
 - leaf, micro-organisms, bean (*Phaseolus*) 6839
 - potassium, metabolism, tissue culture, bean (*Phaseolus*) 7711
- Pachistima*** propagation, cuttings, frame 6134
- Packing**
 - bulbs, annual report, Netherlands 2219
 - containers
 - polystyrene, economics, apple 980
 - types compared
 - apple 5754
 - cucumber and gherkin, annual report, Netherlands 8581
 - cooling
 - cherry 3450
 - cut flowers, carnation 6969
 - damage
 - apple 7307
 - cherry 7307
 - onion 7307
 - fruit 8312
 - fruit weight loss, citrus 7151
 - orientation, mechanical, apple 55
 - plastic, bags, disorder incidence, pineapple 6419
 - before storage, apple 8415
 - straw, fungicides, pomegranate 9118
 - vegetables 8312
 - vibration
 - fruit damage elimination, apple 1802
 - fruit settlement in box, apple 1803
 - work studies, flowers, rose 4704
- Paecilomyces fumoso-roseus***, fungal parasite, *Zephodia convolutella*, small fruits 7498
- Paeonia albiflora***, glycosides 5527
- P. spp.***, plant, anatomy 2313
- Paivaea spp.***, growing, tropical America 377
- Pakistan**, okra varieties, comparative trials 6886
- Palumbina spp.***
 - leaf, anatomy 4680
 - pollinaria 312
- Panax ginseng***
 - alkaloids, determination 1443
 - composition 3961
 - diseases
 - Fusarium spp.* 3052
 - Pythium debaryanum* 3052
 - Rhizoctonia solani* 3052
 - Trichoderma spp.* 3052
 - enzyme activity 2338
 - medicinal properties 6305
 - phytoncides 6305
 - seedling, morphology 8034
 - sterols, content 1445
- P. spp.***
 - diseases, *Fusarium solani* 2057
 - fungicides, injury 3052
- Pandemis heparana***, control, apple pests 7392

Pandemis *contd.*

- P. ribeana***, control, apple pests 7392
- P. spp.***
 - apple pests 478
 - annual report, German Federal Republic 6506
- Panicum capillare***, as weeds, lawns and sports turf 8914
- P. spp.***
 - as weeds
 - bean (*Phaseolus*) 8683
 - coconut 8141
 - peach 1016
 - tea 4106, 9272
 - vegetables, herbs 6777
- Panonychus citri***
 - aerial spraying, orange pests 8079
 - citrus pests 821
 - orange pests 5564
- P. ulmi***
 - annual report, Canada 2515
 - apple pests 30, 455, 473, 1744, 3408, 5731, 5738, 6571
 - annual report
 - Canada 8314
 - Netherlands 5698
 - New Zealand 4171
 - UK 8318
 - biological control, apple pests, annual report, Netherlands 5697
 - control
 - apple pests 4950, 4987, 7384, 7390-7391
 - fungicides, apple pests 5734
 - growth substances, aminozone, apple pests 4214
 - damage, apple pests 953
 - damson pests, annual report, German Federal Republic 6506
 - forecasting, apple pests 1757
 - fruit set, apple pests 7371
 - incidence, apple pests 7394
 - integrated control
 - apple pests 8394
 - peach pests 514
 - pear pests 5738
 - plum pests 81
 - population studies
 - apple pests 4986
 - fungicides
 - apple pests 5737
 - grapevine pests 3586
 - predators
 - apple pests 4213
 - Zetzellia mali*, apple pests 1756
 - varietal resistance, apple pests 953
- Pansea teleturga***, cacao pests 2444
- Pansy**
 - growing, economics 1353
 - pollination 7891
 - weed control, annual report, UK 6128
- Pansy flower**, morphology 7891
- Pansy nutrition**
 - nitrogen 6133
 - phosphorus 6133
- Pansy seed**, treatment, pelleted 1353
- Pantorhytes spp.***, cacao pests 2444
- Papaver spp.***, alkaloids, content 5529
- Papaw**
 - annual report
 - Australia 9121
 - India 4034
 - enzyme activity
 - annual report, Australia 1529
 - diseased plants 3246
 - fruit 8170
 - ripening 3247-3248
 - enzymes, fruit 8170
 - growing
 - Cameroon 1608
 - papain production 843
 - Venezuela 8119
 - harvesting
 - mechanical 6415
 - time of, fruit colour 4878
 - latex, production, growth substances 7216
 - nitrites, content, fruit, ripening 3248
 - papain, extraction 843
 - planting, in bamboo baskets 9192
 - report, USA 6382
 - rhizosphere, leaf, composition 1609
 - seedling, raising, bamboo baskets 9192

Papaw contd.

- species, disease resistance, mosaic 9193
- storage
 - coatings, wax 8171
 - dips
 - disease control
 - Rhizopus stolonifer*, benzyl isothiocyanate 7217
 - stem end rot, benzyl isothiocyanate 7217
- vitamins, content 3339
- wax coatings, storage 8171

Papaw diseases

- Ascochyta* spp.
 - heat treatment 8171
 - post-harvest dips 8171
- Colletotrichum dematium* 1610
- C. gloeosporioides*
 - heat treatment 8171
 - post-harvest dips 8171
- Corynespora cassiicola* 1611
- distortion ringspot 401, 8169
- fruit rots, heat treatment 4072
- leaf reduction, host enzyme activity 3246
- leaf reduction virus 1609
- mosaic 9193
 - transmission, root inoculation 6414
 - vectors, aphids, annual report, USA 6383
- Rhizopus* spp.
 - heat treatment 8171
 - post-harvest dips 8171
- R. stolonifer*
 - fumigation 7217
 - post-harvest dips 7217
- stem end rot
 - fumigation 7217
 - post-harvest dips 7217

Papaw fruit

- aroma 7171
- colour
 - harvesting time 4878
 - heat treatment 4072
- composition 8170
 - nitrogen nutrition 842, 1607
 - potassium nutrition 842
- firmness 3174
- heat treatment, disease control 4072
- irradiation
 - gamma rays, post-harvest, storage life 2435
 - ionizing, post-harvest, storage life 2461
- latex, composition 8170
- nitrate, content 3247
- ripening
 - bio-chemistry 3174
 - enzyme activity 3247-3248
 - nitrate, content 3247-3248
- sugars, content, nitrogen nutrition 1607
- water, content, nitrogen nutrition 1607

Papaw growth substances

- injury, thiouracil 401
- latex, production, ethephon 7216

Papaw leaf, composition, disease affects

1609

Papaw nutrition

- nitrogen 842, 1608
- fruit, composition 1607
- phosphorus 842
- potassium 842, 1608

Papaw pests

- aphids, vectors, mosaic, annual report, USA 6383
- Rotylenchulus reniformis* 2460
- Trichodorus christiei*, vectors, mosaic 9193

Papaw seed, morphology

400

Papaw varieties

- Ghana 7215
- Sunrise Solo 1606
- Waimanalo 9191

Paper

- mats, irrigation, chrysanthemum 8859
- mulch
 - disease incidence, tomato 4570
 - melon (cantaloup and musk) 6814, 7679
 - onion 3762
 - strawberry 6699
- tubes, seedling, raising, cauliflower and broccoli, annual report, UK 1937

Papua New Guinea, oil palm, growing

7206, 7214

Parakeets, damage, guava pests

9174

Paralongidorus maximus, vegetables, pests, annual report, German Federal Republic

8579

P. spp., virus, vectors, grapevine pests, annual report, German Federal Republic

4298

Parametriotes theae

control, cultural methods, tea pests 3279

tea pests 3280

Paramyelois transitella

biological control, almond pests 4955

control, cultural methods, almond pests 33

Parasa pallida

Ivory Coast

coconut pests 9188

oil palm pests 9188

P. spp., coffee pests

1583

P. viridissima

Ivory Coast

coconut pests 9188

oil palm pests 9188

Paratylenchus spp.

soil treatment

carrot pests 8811

celery pests 8811

Parks

landscaping

ornamental plants 2908

trees and shrubs 2908

olive 3164

Parlatoria blanchardi, population studies,

date pests 811

Parmacella olivieri

ornamental plants, pests 1329

vegetables, pests 1329

Parsley

annual report, German Federal Republic 7070

enzyme activity, leaf, determination 5897

enzymes, leaf 5895

glycosides 8001

biosynthesis 8983

growing, Northern Ireland 4733

nucleic acids, translocation, tissue culture 4734

soilless culture 5487

tissue culture

cell suspension 4732

glycosides, biosynthesis 8983

weed control 6777, 8977

Parsley diseases

broad bean wilt virus 3940

carrot mottle 3940

cucumber mosaic 3940

Fusarium spp. 3014

Pythium spp. 3014

Rhizoctonia solani 3014

virus 3941

annual report, UK 1934

incidence, German Federal Republic 6781

western celery mosaic 3940

Parsley flower, bud initiation 6117

Parsley pests, *Meloidogyne incognita* 3014

Parsley varieties

Denmark 7071

forcing 7071

Parsley X celeriac, hybrids 2902

Parsnip

annual report, UK 601

insecticides, residues, plant, lead arsenate 1951

respiration, root, heat production, storage 1148

storage, respiration, heat production 1148

Parsnip diseases

Centrospora acerina 6116

virus, incidence, German Federal Republic 6781

yellow fleck virus, annual report, UK 1934

Parsnip seed, sorting, air flow

4373

Parsnip varieties

annual report, UK 5149

comparative trials, New Zealand 6115

Parthenocissus spp.

leaf

anthocyanins 744

Parthenocissus spp. contd.

leaf contd.

phenolic compounds 744

Paspalum conjugatum, as weeds, rubber

5642

P. spp.

as weeds

cacao 8134

citrus 6338

coffee 4858

oil palm 1601

rubber 4881, 7224, 7226, 9210

tea 4106

P. urvillei, as weeds, citrus 6339

Passiflora foetida, diseases, *Colletotrichum*

gloeosporioides 8966

P. incarnata, alkaloids, determination 9045

P. spp., growing, tropical America 1523

Passion fruit

annual report, Australia 4782

breeding and selection, report, USA 6324

growing, review 2428

processing, review 2428

report, Sri Lanka 6323

Passion fruit diseases

Australia 6518

Gibberella saubinetii, symptoms 9117

Passion fruit, fruit

irradiation, gamma rays, post-harvest, storage life 2435

pulp content 1460

volatile constituents 2429, 4826

Passion fruit nutrition

magnesium, deficiency 1524

major elements, leaf analysis, sampling 1524

nitrogen 1524

NPK 9116

potassium 1524

Passion fruit pests

Australia 6518

Meloidogyne javanica, soil fumigation 7168

nematodes, Brazil 9126

Passion fruit plant

composition 4145

morphology 7167

Passion fruit soil

fumigation

Meloidogyne javanica

DD 7168

EDB 7168

methyl bromide 7168

Paulownia spp.

diseases 7960

cucumber mosaic 7961

Pea

alkaloids 5287

alkanes, biosynthesis, inhibition 7742

aluminium

toxicity

enzyme activity 8721

nitrogen nutrition 7728

phosphorus nutrition 7728

plant tolerance 6864

varietal resistance 8721

amino acids 3753

applied, enzyme activity 7732

biosynthesis 7739

content, sulphur dioxide 6015

metabolism 5261

annual report

Belgium 1131

German Federal Republic 7599

Irish Republic 1939

UK 1934, 3611-3612, 4365, 5149, 5153, 8584

USA 1130, 4368

breeding and selection

disease resistance 6001

disease tolerance, *Aphanomyces* spp. 2817

F₁ hybrids, annual report, USA 3617

leafless forms 2048

for processing 6001

calcium

cell wall, composition 7735, 8730

content, plant 8702

carbohydrates, translocation 214

cell

division, light, red 4508

- Pea contd.**
 cell contd.
 enlargement
 stimulation
 fusicoccin, tissue culture 8727-8729
 growth substances, tissue culture 8727-8729
 cell wall
 composition
 calcium 7735, 8730
 ethylene 7735
 growth substances 7735, 8730
 magnesium 8730
 potassium 8730
 chlorophyll
 biosynthesis
 light 4505
 far-red 4505
 red 4505, 6865
 content
 phytochrome relationships 4937
 seed 3752
 seedling 3752
 chloroplast
 development
 light 6865
 lipids, metabolism 2072
 enzyme activity 8725
 enzymes, content 2819, 3742
 grana formation, inhibition 4515
 saponins, content 7743
 volume variations, measurement 212
 climate 2049
 cold, resistance, hardening, respiration 654
 cuticle, development, annual report, UK 1938
 electrical activity 3847
 enzyme activity 1954, 2063, 6009
 amino acids 7732
 biosynthesis, soil salinity 2815
 chloroplast 8725
 diseased plants, *Pythium* spp. 8791
 growth substances 2067, 2820, 7736-7737
 IAA 6010
 kinetin 6010
 inhibition 5286, 8724
 amino acids 217
 leaf 8723
 determination 5897
 light 7733
 root 7734
 aluminium toxicity 8721
 growth substances, amino acids 4509
 histological studies 5282
 soil salinity 8722
 root extracts 2033
 seed 218, 2061, 8723
 germination 2818, 5280, 8723
 fluorine toxicity 6866
 ripening 8723
 storage 8723
 seedling, herbicides 2070
 shoot, nitrogen nutrition 3741
 enzymes 5896
 biosynthesis 7732
 determination 8724
 diseased plants 8718
 etiolated seedlings 6008
 leaf 2819, 3740, 5895
 root 1234, 7692
 shoot 3742
 ethylene
 cell
 division, inhibition 2065
 expansion 2066
 wall composition 7735
 wall structure 4512
 geotropic responses 2059
 growth substances, translocation 2059
 internode swelling 4512
 nucleic acids
 biosynthesis 2065
 metabolism 4512
 production, growth substances 2069
 root, development 2821
 treatment 222-223
 xylem formation 4511
 fluorine
 toxicity 3735
- Pea contd.**
 fluorine contd.
 toxicity contd.
 seed germination, enzyme activity 6866
 transpiration 3735
 frost
 injury, disease incidence, *Pseudomonas pisi* 4503
 resistance, hardening, respiration 654
 fungicides, metabolism, benomyl 655
 geotropic responses, ethylene 2059
 glycosides, metabolism 8731
 growing
 Argentina 3728
 Bulgaria 3620-3621
 mechanical harvesting 4496
 media, compared 7605
 pea 7605
 Tunisia 4369
 USSR 2050
 growth
 flower formation 8726
 photoperiodism 8726
 growth-yield relationships 3754
 harvesting, time of, plant maturity criteria 4516
 herbicides
 absorption
 2,4-D, solar radiation 5283
 tolerance, terbutryne 4468
 enzyme activity, triazines 2070
 injury
 cyanazine 4501
 tolerance, terbutryne 5888
 Tordon 22K 2051
 trifluralin 4501
 plant, responses, terbutryne 4468
 proteins
 content
 triazines 2070
 triazines, annual report, Irish Republic 5150
 quality 206
 responses, flurenol 4500
 tolerance
 bentazon 8714
 menthabenzthiazuron 8714
 translocation, 2,4-D, solar radiation 5283
 insecticides
 absorption, lindane 6863
 metabolism, aldrin 2033
 persistence, menazon 4504
 translocation, lindane 6863
 iron
 translocation
 nutrient solution
 composition 4507
 pH 4507
 irradiation, resistance, plant composition 1241
 irrigation 3308
 annual report, Canada 1944
 requirements, for processing 8715
 light 6004
 blue, leaf, growth 3738
 enzyme activity 7733
 far-red
 chlorophyll, biosynthesis 4505
 growth substances, endogenous 4514
 leaf, growth 3738
 fatty acids, biosynthesis 6013
 nucleic acids, metabolism 6012
 red
 cell, division 4508
 chlorophyll, biosynthesis 4505, 6865
 chloroplast, development 6865
 ethylene production, inhibition 2059
 geotropic responses 2059
 growth substances, endogenous 4514
 leaf, growth 3738
 water, movement 3737
 yellow, leaf, growth 3738
 lipids, metabolism, leaf, development 2072
 magnesium
 cell wall, composition 8730
 content, plant 8702
 maturity, forecasting 4516
 methyl 2-benzimidazolecarbamate, translocation 655
 mitochondria, saponins, content 7743
- Pea contd.**
 mutants
 photosynthesis 4506
 proteins, content, seed 8732
 nitrates, absorption, growth substances, amino acids 4509
 nucleic acids
 biosynthesis
 growth substances 221
 inhibition, growth substances 3751
 content, growth substances 4500
 metabolism 226
 ethylene 4512
 growth substances 6012
 leaf, development 5289
 light 6012
 plant nutrition 6870
 nucleotides, interaction, growth substances 1237
 nutrients
 content
 molybdenum nutrition 5273
 phosphorus nutrition 5273
 nutritional value, proteins 6018
 organic acids, biosynthesis 7739
 oxygen, translocation 1233
 phosphorus
 content, plant, growth substances 1238
 metabolism 2071
 photoperiodism
 flower bud, initiation 7745
 plant, growth 8726
 photosynthesis 4506
 inhibition, anti-transpirants 3333
 plant nutrition 8693
 phytochrome
 biosynthesis 5285
 -chlorophyll relationships 4937
 degradation, light, coloured 3736
 growth substances, endogenous 4514
 pigments, biosynthesis, growth substances 7738
 potassium
 cell wall, composition 8730
 content
 plant 8702
 root, soil salinity 8722
 proteins 6018
 antagonism growth substances 6016
 biosynthesis 7740
 content 5288, 7744
 cotyledons 3753
 disease resistance, *Erysiphe communis* 7730
 herbicides 206
 molybdenum nutrition 209
 sulphur dioxide 6015
 degradation 3745
 nutrients, content, herbicides 4485
 pterocarpanoids 6233
 quality, storage temperature 6872
 rainfall 2810
 respiration
 cold, resistance 654
 frost, resistance 654
 plant, growth substances 7738
 wind 5254
Rhizobium spp., inoculation, yield increase 6003
 saponins, content, root 7743
 seedling
 composition 657
 cotyledon, removal 2823
 development, ethylene production 1235
 emergence
 soil compaction 5238
 soil temperature 4447
 growth
 seed, size 1228
 soil
 compaction 2053-2054
 types 2053-2054
 sodium, content, root, soil salinity 8722
 solar radiation
 herbicides
 absorption 5283
 translocation 5283
 storage, temperature 5821
 sugars
 metabolism
 growth substances 2058
 light 2058

Pea *contd.*

- sugars *contd.*
 - metabolism *contd.*
 - phytochrome 2058
 - temperature 2058
 - sulphur dioxide
 - amino acids, content 6015
 - proteins, content 6015
 - taxonomy, chemotaxonomy 6233
 - temperature 6004
 - carbon isotope changes 3739
 - leaf
 - phosphorus, content 2060
 - sulphur, content 2813
 - seed
 - development 5274
 - disorder incidence 5274
 - tissue culture
 - cytokinin activity 6017
 - embryo, exudates 4499
 - root 658
 - growth substances, treatment 2073, 6010
 - shoot
 - fusicoccin
 - treatment 78
 - media pH 8727
 - respiration 8728
 - growth substances
 - treatment 6868
 - media pH 8727
 - respiration 8728
 - shoot-tip, leaf bud development 2064
 - transpiration
 - antitranspirants 3333
 - fluorine 3735
 - vitamin treatment
 - bud development 220
 - leaf, composition 6014
 - water, movement, light 3737
 - water relations
 - growth substances, content 3743
 - leaf 5278
 - nutrition 213
 - weed control 206, 2811, 3731, 4501, 5342, 5680, 8588
 - annual report, UK 5885, 8583
 - Avena* spp., annual report, German Federal Republic 7598
 - review 5270
 - wind, respiration 5254
 - yield, estimation, sampling 2047
 - yield-growth relationships 3754
- Pea diseases**
- Aphanomyces euteiches*, nematode relationship 211
 - A. spp.* 2974
 - tolerance 2817
 - Aspergillus ruber* 6860
 - seed, germination 1226
 - enation mosaic
 - alternative hosts 5276
 - host enzymes 5281
 - host proteins 2816
 - Erysiphe communis*
 - host proteins, content 7730
 - varietal resistance 7730
 - E. polygoni*, seed treatment 6861
 - Fusarium martii*
 - host-pathogen relationships 2055
 - toxins 2055
 - F. oxysporum*
 - enzyme, content 8718
 - f. pisi* 2056
 - assessment methods 5165
 - infection process 6862
 - root exudates 8719
 - varietal resistance 6007, 6859
 - secondary invaders 6862
 - F. roseum*, secondary invaders 6862
 - F. solani* 2057
 - secondary invaders 6862
 - F. spp.*, control 5277
 - leaf roll
 - alternative hosts 8717
 - indicator plants 8717
 - Iran 8707
 - mild mosaic, alternative hosts 4502
 - Peronospora viciae* 1230
 - Pseudomonas fluorescens* 651
 - Pseudomonas pisi* 650-651
 - frost, injury 4503
 - incidence 4503

Pea diseases *contd.*

- Pseudomonas pisi* *contd.*
 - varietal resistance 721
 - P. spp.* 651
 - P. syringae* 651
 - P. viridiflava* 651
 - Pythium* spp.
 - control 6920
 - host enzyme activity 8791
 - P. ultimum*, seed treatment 7731
 - seed-borne mosaic, transmission, seed 7729
 - subterranean clover stunt, vectors 6846
 - symptomless virus 6006
 - top yellows virus, varietal resistance 1225
 - virus, annual report, Netherlands 6772
 - yellow mosaic, vectors 6846
- Pea disorders, hollow heart 5274-5275**
- Pea flower**
- bud drop, growth substances 7745
 - bud initiation
 - growth substances 7745
 - photoperiodism 7745
 - seed vernalization 7745
 - formation, plant growth 8726
- Pea growth substances**
- absorption
 - foliar, 2,4-D 2032
 - phenoxycetic acid and derivatives 225
 - amino acid absorption, root, chloramphenicol 1239
 - apical dominance
 - GA 3748
 - IAA 3748
 - bud, development, GA 220
 - cell
 - division, inhibition, 2,4-D 2065
 - expansion
 - 2,4-D 2066, 8727
 - IAA 8727-8729
 - NAA 8727
 - cell wall
 - composition
 - IAA 7735
 - kinetin 7735, 8730
 - endogenous 2067, 3744
 - determination, xanthoxin 3719
 - light, red 4514
 - plant, apical dominance 4510
 - shoot 1236, 6011
 - translocation, ethylene 2059
 - wilting 3743
 - enzyme activity
 - auxins 2820
 - cytokinins 2820
 - root, amino acids 4509
 - shoot, IAA 7736-7737
 - ethylene
 - production
 - abscisic acid 2069
 - GA 2069
 - IAA 2069
 - kinetin 2069
 - flower bud
 - drop, GA 7745
 - initiation, GA 7745
 - growth inhibition
 - IAA 3748
 - trisporic acid 7738
 - interaction
 - applied
 - aminozide, and endogenous 3744
 - chlormequat, and endogenous 3744
 - p*-coumaric acid, and endogenous 3744
 - Phosphon-D, and endogenous 3744
 - thioureidobenzoic acids, and endogenous 3744
 - applied and endogenous 2067
 - 2,4-D, BA application 2065
 - IAA, GA application 3748
 - nucleotides 1237
 - proteins, GA 6016
 - seed treatment, vernalization 7745
 - tannins, GA 2825
 - tryptophan application
 - GA 3747
 - IAA 3747
 - metabolism, IAA 6869
 - NAA translocation, DPX1840 2824
 - nitrate, absorption, amino acids 4509

Pea growth substances *contd.*

- nucleic acids
 - biosynthesis, inhibition, MH 3751
 - content
 - chlormequat 4500
 - 2,4-D 4500
 - TIBA 4500
 - metabolism, GA 6012
 - phosphorus, metabolism, GA 3746
 - pigments, biosynthesis, trisporic acid 7738
 - respiration, trisporic acid 7738
 - responses
 - chlormequat 1238, 4500
 - phosphorus nutrition 2068
 - 2,4-D 4500
 - GA 1238
 - hydroquinone 3750
 - IAA 1238
 - Phosphon, phosphorus nutrition 2068
 - resorcin 3750
 - SADH 1238
 - TIBA 4500
 - vanillin 3750
 - root
 - formation on cuttings
 - GA 3747
 - IAA 3747
 - growth
 - IAA 6010-6011
 - inhibition, IAA 3749
 - root nodule, formation, ethephon 207
 - shoot
 - growth
 - auxins 2822
 - GA 2823
 - IAA 6868
 - stem, elongation 221
 - translocation
 - IAA 216, 2821, 4513, 5279
 - kinetin 216
 - xylem, formation, 2,4-D 4511
- Pea leaf**
- bud development, tissue culture 2064
 - composition 3675
 - protein 209
 - vitamin treatment 6014
 - development
 - lipids, metabolism 2072
 - nucleic acids, metabolism 5289
 - fatty acids, biosynthesis 6013
 - ferredoxins 1240
 - growth
 - light
 - blue 3738
 - far-red 3738
 - red 3738
 - yellow 3738
 - nutrient absorption, manganese, surfactants 1136
 - nyctinasty 6235
 - phosphorus, content, temperature 2060
- Pea nutrition 6004**
- calcium 3733
 - cobalt, nitrogen, fixation 2814
 - general
 - deficiency, nucleic acids, content 6870
 - nucleic acids, content 6870
 - iron
 - absorption
 - nutrient solution
 - bicarbonate content 4507
 - composition, pH 4507
 - major elements, ion exchange 3732
 - manganese
 - amino acids, composition 5284
 - application, foliar, surfactants 1136
 - leaf, absorption, surfactants 1136
 - minor elements
 - availability, nitrogen nutrition 8589
 - ion exchange 3732
 - pest incidence 1232
 - sources 8589
 - toxicity, nitrogen nutrition 8589
 - molybdenum 6003
 - calcium content 5273
 - nitrogen, fixation 2814
 - nitrogen content 5273
 - phosphorus content 5273
 - phosphorus nutrition 5272-5273
 - proteins, content 209
 - nitrogen
 - aluminium toxicity 7728

Pea nutrition *contd.*

- nitrogen *contd.*
 - enzyme activity, shoot 3741
 - fixation
 - cobalt nutrition 2814
 - molybdenum nutrition 2814
 - host-pathogen relationships, *Fusarium martii* 2055
 - leaf analysis 6005
 - phosphorus nutrition 7728
 - sources
 - minor elements 8589
 - minor elements toxicity 8589
- NPK, photosynthesis 8693
- phosphorus 3733, 5272
 - aluminium toxicity 7728
 - interaction, growth substances 2068
 - molybdenum nutrition 5272–5273
 - nitrogen content 5273
 - nitrogen nutrition 7728
- pest incidence 1232
- proteins, biosynthesis 6005
- potassium
 - pest incidence 1232
 - plant, composition 5243
 - proteins, biosynthesis 6005
- sodium, plant, composition 5243
- sulphur, requirements, temperature 2813

Pea pests

- Aphis craccivora*, vectors, virus 6846
- A. fabae* 4504
- A. gossypii*, vectors, virus 6846
- Delia platura*, infestation source 8720
- Ditylenchus dipsaci* 3878
- Macrosiphum euphorbiae*, vectors, virus 6846
- M. pisi*
 - host nutrition, foliar 1232
 - predators 1232
- Myzus persicae*, vectors, virus 6846
- Phytomyza atricornis* 652–653
- Pratylenchus penetrans* 1231
 - root rot relationship 211

Pea plant

- composition 4145
- amino acids 5284
- soil salinity 210

Pea pod

- irradiation, gamma rays, post-harvest, storage life 2074
- storage, temperature 6872

Pea root

- amino acids
 - absorption
 - calcium 1239
 - enzyme treatment 1239
 - growth substances, chloramphenicol 1239
- composition 2071
- development
 - ethylene 2821
 - growth substances 2821
- enzyme activity, histological studies 5282
- growth 2052
 - growth substances 6011
 - IAA 6010
 - kinetin 6010
 - inhibition, growth substances, IAA 3749
 - soil
 - aeration 2812
 - compaction 2053–2054
 - oxygen concentration 2812
 - nitrogen, content 658
 - nodule, enzyme activity 1229
 - nodule bacteria
 - bacterial contamination 4469
 - enzyme activity, nitrogen, fixing 1229
 - nodule formation 207
 - cobalt nutrition 2814
 - insecticides 652
 - molybdenum nutrition 2814
 - nitrogen nutrition 2814
 - sodium glutamate 5271
 - nucleic acids, content 658
 - proteins, content 209, 658
 - secretion, *Rhizobium leguminosarum* growth 8716
 - sugars, metabolism 7741
- Pea seed**
 - amino acids, content, mutants 8732
 - composition, processing 649
 - damage, *Aspergillus ruber* 1226

Pea seed *contd.*

- development, temperature 5274
- drying
 - silica gel 1137
 - viability 6871
- germination
 - cytological changes 656
 - disease damage 1226
 - enzyme activity 2062, 2818, 5280, 8723
 - fluorine toxicity 6866
 - hollow heart disorder 5274–5275
 - metabolic processes 215
 - respiration 1227
 - soil, salinity 210
 - water relations 1227, 6860
- organic acids
 - content
 - ripening 5290
 - varietal differences 5290
 - phosphorus, content, seed, size 1228
 - polyploid cells 6867
 - production, harvesting, time of 6871
- proteins
 - content 4941
 - mutants 8732
- quality, herbicides 206
- ripening
 - enzyme activity 8723
 - organic acids 5290
 - proteins, biosynthesis 6867
- sorting, air flow 4373
- sowing
 - dates, Pakistan 2809
 - spacing 2049, 3754
- storage
 - enzyme activity 8723
 - methods compared 6860
 - temperature 208
- treatment
 - fungicides 3622
 - benomyl 6861
 - captan 5277
 - chloroneb 7731
 - thiram 7731
 - growth substances
 - GA 4498
 - IAA 4498
 - kinetin 4498
 - 2-hydroxyethylhydrazine 224
 - mutagens 205
 - Rhizobium leguminosarum* 208, 5271
 - sodium glutamate 5271
 - Rhizobium leguminosarum* 4497
 - vernalization
 - flower bud initiation 7745
 - interaction, growth substance treatment 7745
- viability 6871
- Pea shoot**
 - apices, mechanical stresses 7803
 - composition
 - abscisic acid 1236
 - ribonucleosides 219
- Pea soil**
 - aeration, root, growth 2812
 - compaction
 - root, growth 2053
 - seedling emergence 5238
 - seedling growth 2054
 - moisture 6004
 - seedling growth 2053
 - oxygen concentration, root, growth 2812
 - salinity
 - amino acids, biosynthesis 2815
 - enzyme activity 2815, 8722
 - plant, composition 210
 - plant tolerance 3734
 - potassium, content, root 8722
 - sodium, content, root 8722
 - seedling emergence 4447
 - types, seedling growth 2053–2054
- Pea varieties**
 - aluminium, toxicity, resistance 8721
 - annual report
 - UK 1937
 - USA 1935
 - Zambia 8587
 - comparative trials, Bulgaria 3730
 - disease incidence, seed-borne mosaic 7729
 - disease resistance
 - Fusarium oxysporum*, f *pisi* 6859

Pea varieties *contd.*

- disease resistance *contd.*
 - top yellows virus 1225
- herbicides, tolerance 8714
- Pakistan 2809
- processing
 - canning 6002
 - freezing 1242
 - USSR 649
- Sardinia 3729
- winter hardiness 3729
- Peach**
 - amino acids, content, leaf 5773
 - annual report
 - Australia 450, 5693
 - Canada 2515, 8314
 - Cyprus 3345
 - Italy 6507
 - USA 24, 451, 1706, 3348–3349, 4945, 8319
 - Yugoslavia 3350
 - ascorbic acid, content, NPK nutrition 6629
 - breeding and selection 3481
 - annual report, Australia 8313
 - early fruiting 4242
 - interspecific hybridization 4244
 - calcium
 - content
 - flower 6631
 - fruit 6631
 - carbohydrates
 - metabolism
 - leaf 5773
 - seasonal variations 3479
 - chilling requirements 3480
 - cover crops
 - Festuca rubra*, pest incidence, *Pratylenchus penetrans* 7452
 - grass sward 1017
 - Sorghum vulgare*, pest incidence, *Pratylenchus penetrans* 7452
 - cyanide, toxicity, interstocks 4260
 - defoliation
 - chemical 6510–6511
 - growth substances 6511
 - dormancy
 - chlorogenic acid, content 7453
 - growth substances, endogenous 5758
 - naringenin, content 7453
 - drought
 - photosynthesis 908
 - plant
 - cell numbers 908
 - composition 908
 - resistance
 - frost resistance 7444
 - stomata
 - number 7444
 - size 7444
 - respiration 908
 - economics
 - insecticides, application, Italy 4153
 - orchard depreciation 4250
 - enzyme activity
 - flower bud, carbohydrates, metabolism 3479
 - fruit
 - browning 5044
 - damage causes browning 82
 - disorders 5044
 - senescence 5044
 - leaf
 - diseased plants 5771
 - light intensity 3491
 - shoot, carbohydrates, metabolism 3479
 - ethylene
 - fruit, abscission 2643
 - leaf, abscission 2643
 - production, stressed branches 911
 - fatty acids, seed 8424
 - flowering
 - growth substances, GA 5774
 - light, intensity 3491
 - forcing, plastic films 3480
 - frost
 - injury
 - bud development 1709
 - flower bud 4235
 - protection
 - heaters 28
 - plastic films 3358
 - resistance 5031

Peach contd.

- frost contd.
 - resistance contd.
 - drought resistance 7444
 - flower bud development 7440
 - herbicides, dichlobenil 1819
 - varieties 1818
- fruiting, precocity 3481
- fungicides 3320
 - fruit, ripening, benomyl 2632
 - residues
 - determination, binapacryl 7324
 - fruit, DCNA 5780
 - respiration
 - flower bud 4951
 - leaf 4951
 - translocation, oxycarboxin, growth substances 5707
- growing
 - high altitudes, India 7311
 - Hungary, review 6622
 - Italy, for processing 7442
 - Portugal, review 2518
 - for processing 6623
 - Thailand 77
 - USSR 4251
 - Venezuela 8119
- harvesting
 - labour requirements 6627
 - mechanical
 - equipment 457, 1831
 - tractor-drawn frame 4267
 - time of, fruit ripening 8463
- heat treatment, fungus control, fruit 6619
- herbicides 3322
 - frost, resistance, dichlobenil 1819
 - injury
 - bromacil 8454
 - dichlobenil 1819
 - GS-21704 5032
 - terbacil 452
 - tolerance 3510
- high density planting, Switzerland, statistics 8324
- hybrids 3465
- insecticides 3318
 - application, economics 4153
 - fruit, thinning, DNOC 4263
 - residues
 - arsenic 3329
 - determination, monocrotophos 7302
- interstocks, cyanide toxicity 4260
- iron
 - content
 - flower 6631
 - fruit 6631
- irrigation
 - fruit, composition 6629, 7447
 - leaf, composition 7447
 - pest incidence 5033
 - plant nutrition 6629, 7447
 - requirements 4160, 5033, 7445
 - root, growth 6628
 - schedules, compared 1820
 - shoot, composition 7447
- labour requirements
 - harvesting 6627
 - pruning and training 6627
- lead, residues 4936
- light
 - intensity
 - enzyme activity 3491
 - flowering 3491
 - leaf
 - ascorbic acid, content 3491
 - chlorophyll, content 3491
 - photosynthesis 7325
 - respiration 3491
- magnesium
 - content
 - flower 6631
 - fruit 6631
- manganese
 - content
 - flower 6631
 - fruit 6631
- mulching
 - hay 1017
 - weeds 4256
- mutagens, ethyl methane sulphonate 6635
- nematicides, injury, Di-Trapex 4258

Peach contd.

- nitrogen
 - content
 - flower 6631
 - fruit 6631
- nutrient absorption, nitrogen, nutrition 466
- phosphorus
 - content
 - flower 6631
 - fruit 6631
 - translocation 3478
- photosynthesis 7325
 - drought 908
- planting
 - high density, Switzerland 904
 - survey, Switzerland 904
- pollen
 - germination, morphology 8330
 - sterility 7454
- potassium
 - content
 - flower 6631
 - fruit 6631
- processing
 - canning, varietal behaviour 3458, 7442
 - fruit, quality, growth substances 1830
 - production and trade, Hungary 6622
 - proteins, biosynthesis 5773
 - pruning and training
 - flower bud, initiation 3482
 - fruit, size 1019
 - "fruit-branch concentration" method 5035-5036
 - goblet 4255, 6627
 - labour requirements 6627
 - irrigation 4253
 - methods compared 4254-4255, 5037, 6626, 7446, 8379
 - disease incidence 8455
 - palmette 2566, 4255, 6627, 8455
 - labour requirements 6627
 - time of 5034
- replanting
 - calcium nutrition 1821
 - nitrogen nutrition 1821
 - soil, fumigation, nematode control 1021, 3475
- report
 - Australia 3344
 - USA 8320
- respiration
 - leaf, light intensity 3491
 - plant, drought 908
- sodium
 - content
 - flower 6631
 - fruit 6631
- sterols, seed 8424
- stomata
 - number, drought resistance 7444
 - size, drought resistance 7444
- storage
 - controlled atmosphere
 - chilling injury 5778-5779
 - hypobaric 7326
 - fruit composition 7326
 - harvesting, time of 8463
 - pre-cooling, equipment 2646
- temperature
 - bud, development 1709
 - flower bud, drop 8461
- tissue culture
 - callus
 - cyanide toxicity 4260
 - grafting compatibility studies 3567
 - embryo 5772
 - mesocarp
 - carbon dioxide, treatment 4261
 - ethylene, treatment 4261
 - growth substances, treatment 4261
- transpiration 1023
- transport
 - containers, refrigerated 7426
 - in water 1718
- tree, volume, estimation 8452
- vitamin E, seed 8424
- water, content, drought resistance 7444
- weed control 78, 452, 1016-1017, 4252, 5032, 7316, 8454
- limited 79
- pest incidence, *Pratylenchus penetrans* 7452

Peach contd.

- as windbreaks 4294
- winter hardiness 4251, 5020
- Peach bud**
 - development
 - chlorogenic acid, content 7453
 - naringenin, content 7453
 - dormancy
 - chlorogenic acid, content 7453
 - naringenin, content 7453
- Peach diseases**
 - Agrobacterium radiobacter*
 - biological control 443
 - var. *tumefaciens*, biological control 2642
 - Armillaria mellea*, pathogenicity tests 1020
 - canker 5770
 - Cladosporium carpophilum*, control 7448
 - dark green sunken mottle
 - host reactions 6632
 - incidence, Australia 5038
 - indexing 3473
 - eastern X-disease, plant composition 5769
 - Gloeosporium laeticolor*, control 7448
 - Glomerella cingulata*, control 7448
 - Leucostoma cincta* 80
 - incidence, pruning and training 8455
 - L. persoonii* 80
 - line pattern 4948
 - Monilinia fructicola* 1832
 - fruit dips 1832
 - heat treatment 1832
 - peach X- 2641
 - Phomopsis* spp., infection process 7449
 - Phymatotrichum omnivorum* 4257
 - plum pox 4948
 - prune dwarf 4948
 - host reactions 6632
 - indexing 3473
 - Prunus necrotic ring spot virus* 6633
 - Prunus necrotic ringspot*
 - host reactions 6632
 - incidence, Australia 5038
 - indexing 3473
 - Prunus* stem pitting virus, detection, root chip inoculation 512
 - Pseudomonas mors-prunorum*, population studies 5040
 - P. syringae* 2083
 - raspberry ring spot virus 510
 - resistance, own-rooted plants 7443
 - Rhizopus stolonifer* 5780
 - Sclerotinia fructicola* 7450, 8475
 - control 7448, 8305
 - heat treatment 6619
 - incidence 6634
 - post-harvest dips 6619, 7481
 - Sphaerotheca pannosa*, host morphology 8458
 - S. spp.* 513
 - stem pitting 3474
 - growth substances, endogenous 5039
 - incidence 5768
 - stem pitting virus 1823, 5766
 - soil sterilization 1824
 - vectors, *Xiphinema americanum* 1822
 - Stereum purpureum*, incidence 7451
 - Taphrina deformans*
 - annual report, German Federal Republic 6506
 - control 7448
 - host enzyme activity 5771
 - resistance, own-rooted plants 7443
 - tomato black ring virus, control, heat treatment 1809
 - virus, interactions 6632
 - Xanthomonas pruni*
 - control 7448
 - varietal resistance 1816
- Peach disorders**
 - apoplexy, fungus relationships, *Phytophthora* spp. 454
 - browning, enzyme activity 5044
 - chlorosis, iron nutrition 4947, 8457
 - soft suture, fluorine toxicity 5767
 - woolly breakdown, enzyme activity 5044
- Peach flower**
 - bud development, frost resistance 7440
 - bud drop, temperature 8461
 - bud initiation
 - growth substances 5774, 8460

Peach flower *contd.*

- bud initiation *contd.*
 - growth substances *contd.*
 - GA 1826
 - pruning and training 3482
- development 7441
- growth substances, endogenous, content 5042
- morphology, growth correlations 4164
- nutrients, content 6631

Peach fruit

- abscission
 - ethylene 2643
- growth substances 5775
- amino acids
 - content 6834
 - varietal differences 4268
 - sugars, content 8667
- colour
 - growth substances 1830, 8462
 - ethephon 1829
 - nitrogen nutrition 3470
- composition 7327, 8463
- fluorine application 5767
- irrigation 7447
- storage, controlled atmosphere, hypobaric 7326
- volatile constituents 5793
- development 4264
- drop 1828
- growth substances 5775
- ethylene
 - production
 - growth substances
 - aminozide 4264
 - ethephon 4264
- firmness
 - fluorine application 5767
 - growth substances 1830, 6636
 - ethephon 1829
- loosening, growth substances, ethephon 2643
- maturity
 - growth substances, ethephon, aminozide 4264
 - tests 5777
- nitrogen, content, varietal differences 4268
- number, pruning and training 5035
- nutrients, content 6631
- organic acids, sugars, content, seasonal variations 6522
- parthenocarp, growth substances 5043, 5775, 5775
- quality, pruning and training 5035
- ripening 8463
 - fluorine application 5767
 - fungicide treatment, benomyl 2632
 - growth substances 1830, 8462
 - aminozide 1026, 2632, 4264, 5776
 - 3-CPA 83
 - ethephon 83, 1829, 4264
 - nitrogen nutrition 3470
 - oil treatment 2632
- senescence, enzyme activity 5044
- size
 - growth substances 5043, 6636
 - irrigation 1820
 - nutrition 508
 - pruning and training 1019
- splitting, growth substances, ethephon 83
- sugars, content 6834, 8667
- thinning 1025, 4263
 - chemical 456
 - time of, seed development 3484
- growth substances 1828, 2644-2645, 3483, 3485, 6613
- CPA 1024
- 3-CPA 83
- ethephon 83
- morphactins 4262, 5743
- naphthylphthalamic acid 1827
- 1,1,5,5-tetramethyl-3-dimethylaminodithiobiuret 515
- insecticides, DNOC 4263
- mechanical 456, 7455
- methods compared 7455

Peach growth substances

- endogenous 5758
- determination, gibberellins 5776
- diseased plants 5039
- embryo, seed development 5772
- flower 5042

Peach growth substances *contd.*

- endogenous *contd.*
 - fruit 5776
 - abscission 3483
 - plant, dormancy 5758
 - seed 2523, 2637, 4249
 - seedling 5772
- ethylene
 - production
 - aminozide 4264
 - ethephon 2643, 4264
- flower bud
 - initiation
 - GA 1826, 5774
 - morphactins 8460
- flowering, GA 5774
- fruit
 - abscission, GA 5775
 - colour
 - aminozide 1026, 1830, 8462
 - ethephon 1829
 - firmness
 - aminozide 1830, 6636
 - ethephon 1829
 - loosening, ethephon 2643
 - maturity
 - aminozide 4264
 - ethephon 4264
 - parthenocarp, GA 5043, 5775
 - ripening
 - aminozide 1026, 1830, 2632, 4264, 5776, 8462
 - 3-CPA 83
 - ethephon 83, 1829, 4264
 - size
 - aminozide 6636
 - GA 5043
 - splitting, ethephon 83
 - thinning
 - chlorflurenol methyl ester 4262
 - CPA 1024
 - 3-CPA 83, 2645, 3483, 3485
 - 2,4-D 6613
 - ethephon 83, 2644, 3483, 3485
 - flurenol n-butyl ester 4262
 - MH 6613
 - morphactins 5743
 - NAA 6613
 - naphthylphthalamic acid 1827
 - N-1-naphthylphthalamic acid 1828
 - 1,1,5,5-tetramethyl-3-dimethylaminodithiobiuret 515
 - 2,4,5-T 6613
- fungicides
 - translocation
 - aminozide 5707
 - chlormequat 5707
- injury
 - chlorflurenol methyl ester 4262
 - 3-CPA 3485
 - ethephon 7314
 - flurenol n-butyl ester 4262
- interaction
 - BA, GA application 2637
 - GA, BA application 2637
- leaf
 - abscission, ethephon 2643
 - morphology
 - aminozide 6613
 - 2,4-D 6613
 - MH 6613
 - NAA 6613
 - 2,4,5-T 6613
 - vascular development
 - GA 5039
 - IAA 5039

Peach leaf

- abscission
 - ethylene 2643
- growth substances, ethephon 2643
- ascorbic acid, content, light intensity 3491
- cell sap, concentration, seasonal variations 916

Peach leaf *contd.*

- chlorophyll, content, light intensity 3491
 - composition
 - irrigation 7447
 - potassium nutrition 3471
 - manganese, content, iron nutrition 8457
 - morphology, growth substances 6613
 - nitrogen
 - content
 - iron nutrition 8457
 - seasonal variations 508
 - soil management 1017
 - phosphorus
 - content
 - iron nutrition 8457
 - seasonal variations 508, 6630
 - potassium
 - content
 - iron nutrition 8457
 - seasonal variations 508, 6630
 - soil management 1017
 - removal, chemical 6510-6511, 7314
 - temperature, photosynthesis 7325
 - zinc, content, iron nutrition 8457
- Peach nutrition**
- Algifert
 - fruit
 - firmness 4265
 - ripening 4265
 - storage life 4265
 - calcium, leaf analysis 1018
 - general
 - leaf analysis 7369
 - sampling 3469
 - iron
 - chlorosis 4947
 - disorder incidence, chlorosis 8457
 - manganese content 8457
 - nitrogen content 8457
 - phosphorus content 8457
 - potassium content 8457
 - zinc content 8457
 - magnesium, leaf analysis 1018
 - minor elements, leaf analysis 2639
 - nitrogen 466, 1019
 - fruit, maturity 8456
 - leaf analysis 1018
 - phosphorus absorption 466
 - potassium absorption 466
 - sources
 - fruit
 - colour 3470
 - ripening 3470
 - leaf analysis 3470
- NPK 508, 7447**
- application, methods compared 2640
 - fruit
 - composition 6629
 - size 508
 - irrigation 6629
 - leaf analysis 492, 2639, 3472
- phosphorus 8456**
- leaf analysis 1018
- potassium**
- leaf analysis 1018, 3471
 - nematicide injury, reduction 4258
 - root analysis 3471
 - yield reduction 8456
- survey, Australia 1813**
- WUXAL 4198**
- Peach pests 1696**
- Anastrepha fraterculus* 8459
 - aphids
 - fungus parasites 1022
 - predators 1022
 - Ceratitis capitata* 8459
 - Cydia molesta* 5041
 - integrated control 514
 - Eulecanium coryli* 3476
 - Euzophera semifuneralis* 3477
 - Grapholitha molesta*, control 7448
 - Hyalopecter arundis*, control 7448
 - Lyonetia clerckella*, control 7448
 - Meloidogyne incognita* 4258
 - rootstock resistance 6624
 - mites 3324
 - biological control 29
 - Myzus persicae*, control 7448
 - Panonychus ulmi*, integrated control 514
 - Pratylenchus penetrans*
 - population studies
 - cover crops 7452
 - herbicides 7452

Peach pests contd.*Pratylenchus* contd.

Pratylenchus vulnus, soil fumigation 1021, 3475

review, Bolivia 5671

Serrodes partita, traps, light 4259

Synanthedon hector, control 7448

S. pictipes 3477

Tetranychus pacificus 81

biological control 81

Tetranychus telarius, irrigation 1820, 5033

Xiphinema americanum, virus vectors, stem pitting virus 1822

Peach plant

nitrogen, content, seasonal variations 508

phosphorus, content, seasonal variations 508

potassium, content, seasonal variations 508

Peach × plum, hybrids 4244

Peach propagation 26

air-layering 1015

budding, budwood, treatment, mutagens 6635

cuttings

root, treatment, growth substances, IBA 8323

shoot

age 4178

part 4178

source plants, treatment, growth substances 1809

treatment

growth substances 1809, 4178

IBA 3467

2-methyl-5-oxybenzofuran-3-carboxylic acid 3467

grafting, dormant scions during growing season 77

own-rooted plants, disease resistance 7443

Peach rootstocks

almond, compatibility 3468

almond X peach hybrid 2638

apricot X bessey cherry X cherry plum hybrid 1014

breeding and selection, annual report, Tunisia 4944

chlorosis resistance 2638

comparative trials

apricot 76

myrobalan 76

peach 76

plum 3468

Prunus insititia 3468

P. spp., hybrids 76

seedling 3468

disease resistance 2638

myrobalan 1014

nematode resistance 2638

nutrition, NPK 3403

Palmirskogo peach 1014

peach 2638

pest resistance, *Meloidogyne incognita* 6624

plum 2638

propagation

cuttings

treatment

fungicides 1817

growth substances 1817, 3509

Prunus persica var. *apocarpa* 4243

-scion relationships 3468

transpiration 1023

St. Julien A, propagation 3509

transpiration 1023

Peach seed

development, fruit, thinning 3484

germination 507

metabolic processes 2523

growth substances, content 5772

treatment

growth substances 2637

hydrochloric acid 507

scarification 507

soaking, cold water 507

stratification

endogenous growth substances 4249

growth substances, content 2637

metabolic processes 2523

Peach shoot, composition, irrigation 7447

Peach soil

chlorine, toxicity 509

fumigation, *Pratylenchus vulnus* 3475

management, methods compared 1017

moisture, soil management 4256

salinity 5765

tolerance, Crimea 509

sickness 3475

sterilization

chemicals, virus incidence 1824

steam, virus incidence 1824

structure, soil management 4256

Peach varieties

Albatros 3565

annual report, Belgium 6503

Austria 4266

Brighton 8453

Canada 1724

canning, Australia 74

comparative studies, South Africa 8322

comparative trials 504

disease resistance 1816

virus 6632

Eden 8453

frost resistance 1816, 1818

fruit

amino acids, content 4268

ripening, time 3457

Ingwe 3565

Italy 75, 3460-3464, 7442

Nai-ranna Zh"lta 506

Nairanna Zh"lta 3466

Nishiki 5030

Orion 3565

processing 5028-5029, 6623

canning 3458-3459, 7442

freezing 1814-1815

Prodigiosa Morettini 4248

register, USA 3356, 4156

review, Italy 6625

Rhodesia 5764

Rumenya 3466

Tunisia 4155

USA 5027

winter hardiness, annual report, Canada 5696

Yugoslavia 3456-3457

Pear

acaricides, residues, fruit, Plictran 1770

annual report

Australia 450, 5693

Belgium 902, 2517, 6503

Canada 8314

German Federal Republic 4943

Italy 6507

Netherlands 4956, 5697

UK 903, 3373, 8318

USA 24, 3348

Yugoslavia 3350

ascorbic acid, content, fruit, varietal differences 7416

bactericides, resistance, *Erwinia amylovora*, streptomycin 5787

biennial bearing

growth substances

aminozide 4279

chlormequat 4279

breeding and selection 2648

annual report

Canada 2515

Sweden 6508

USA 451, 4945

disease resistance

Alternaria kikuchiana 6642

Erwinia amylovora 6637

Venturia nashicola 6642

cadmium, determination 4389

cover crops

grass sward 1028

irrigation compared 2649

defoliation

chemical 5716, 6510-6511

growth substances 6511

drought

photosynthesis 908

plant

cell numbers 908

composition 908

respiration 908

economics

EEC 3342

insecticides, application, Italy 4153

UK 3342

Pear contd.

enzyme activity

disease resistance, *Alternaria kikuchiana* 7458

fruit

ripening 88, 1031, 8472

storage 4284

leaf

light intensity 3491

phenolic compounds metabolism

6645

Yuzuhada disorder 1031

enzymes, determination, fruit 4278

flowering, light, intensity 3491

frost

injury, bud development 1709

protection, heaters 28

resistance, electrical conductivity 4994

fungicides 3320

residues

determination

benomyl 6501

binapacryl 7324

thiabendazole 6501

fruit, benomyl 1698

grading, annual report, Netherlands 23

growing

Crimea 2647

economics, Australia 1721

high altitudes, India 7311

Portugal, review 2518

terraced slopes 6549

grubbing 3342

harvesting

annual report, Canada 5694

book 5706

containers, trays, liners 1033

mechanical

annual report, UK 5752

equipment 457

time of, fruit maturity tests 1789-1790

herbicides 3322

injury

diuron 7357

metobromuron 7357

residues

soil

chlorthiamid 6542

dichlobenil 6542

toxicity

dicamba 2495

picloram 2495

yield increase, simazine 8466

high density planting, Switzerland, statistics 8324

hybrids 3487

insecticides 3318

application, economics 4153

residues 3328

arsenic 3329

determination, monocrotophos 7302

fruit

chlorinated hydrocarbons 5740

Perthane 2500

interstocks 8465

for Beurré Bosc 5784

irrigation, cover crops compared 2649

lead

determination 4389

residues 4936

light

growth substances, absorption 3495

intensity

enzyme activity 3491

flowering 3491

leaf

ascorbic acid, content 3491

chlorophyll, content 3491

respiration 3491

manganese, toxicity, calcium nutrition

3492

mulching 8466

clover-grass mixture clippings 936

leaf, potassium content 938

sawdust 4191

mutants 6530

nucleic acids, applied, pollen, germination

2651

packing

book 5706

plastic, films 1035

Pear *contd.*

- phenolic compounds, content, leaf, disease resistance, *Alternaria kikuchiana* 6645
- photosynthesis
 - drought 908
 - productivity, estimation 5053
- planting
 - high density 3489
 - Switzerland 904
 - spacing 5046
 - leaf, water content 1030
 - pruning and training 3489
 - survey, Switzerland 904
 - systems, compared, light interception 4960
- pollen
 - amino acids, content 5744
 - germination
 - media 5790
 - nucleic acids 2651
 - temperature 5790
- pollen tube, growth, temperature 6648
- pollination 2652, 3496
 - artificial 6647
 - cross- and self- compared, fruit set 6647
- fruit
 - parthenocarp 6649
 - set 6649
 - pollinating varieties 517, 4273, 5789
- production and trade
 - EEC 3342
 - UK 3342
- pruning and training
 - mechanical 4230
 - equipment 4230, 5703
 - methods compared 3489
 - fruiting 6641
 - time of 6640
 - trellising, growth correlations 6639
- radioactivity, natural 1843
- replanting, soil, fumigation, nematode control 5728
- respiration
 - fruit, storage 5792
 - leaf, light intensity 3491
 - plant, drought 908
- storage 5055
 - coatings, plastic 1035
 - cold 3498
 - disorder incidence 1800, 3499, 5792
 - enzyme activity 5792
 - fruit
 - composition 5792
 - enzyme activity 4284
 - respiration 5792
 - varietal behaviour 8471
- containers, trays, liners 1033
- controlled atmosphere 5002
 - disorder incidence 3499, 5792
 - enzyme activity 5792
 - fruit, composition 1035, 5792
 - hypobaric 7326
 - respiration 5792
 - varietal behaviour 6650
- dips
 - disease control
 - Alternaria alternata* 5007
 - Botrytis cinerea* 5007
 - Penicillium expansum* 5007
 - scald control
 - DPA 1800
 - ethoxyquin 1800
- diseases 4227
 - fruit composition 7326
 - growth substances 7407
 - packing methods compared 3498
 - plastic bags 5747
 - rots 3499
 - Mucor piriformis* 4285
 - temperature 1035, 4283
 - disorder incidence 3499
 - water loss 3177
- temperature
 - bud, development 1709
 - fruit, development 6648
 - fruit disorders 1841
 - pollen tube, growth 6648
- tissue culture
 - callus, grafting compatibility studies 3567
 - embryo 2591

Pear *contd.*

- tissue culture *contd.*
 - embryo *contd.*
 - media 2546
 - transport
 - book 5706
 - containers, trays, liners 1033
 - water relations, leaf browning 516
 - weed control 452, 2495, 6542, 7357
 - annual report, UK 8316
 - nurseries 7357
 - windbreaks, disease incidence 85
 - winter hardiness, varietal differences 5045
 - wound healing, treatments, Santar 4207
- Pear diseases**
 - Agrobacterium tumefaciens*, rootstock treatment, pre-planting 4207
 - Alternaria alternata*, post-harvest dips 5007
 - A. kikuchiana*
 - host enzyme activity 7458
 - host phenolic compounds 6645
 - resistance 7458
 - breeding and selection 6642
 - varietal resistance 6645
 - Australia 6518
 - Botrytis cinerea*, post-harvest dips 5007
 - decline 4272, 4948
 - annual report, German Federal Republic 6504
 - decline virus 1836
 - Entomosporium maculatum* 8478
 - Erwinia amylovora* 3494, 4275, 6643
 - alternative hosts 6519
 - annual report, Netherlands 5698
 - as an epiphyte 5787
 - hawthorn windbreaks 85
 - incidence 4274, 5049
 - resistance, breeding and selection 6637
 - varietal resistance 3486, 5049, 5786
 - vectors
 - Minettia* spp. 5787
 - Pegomya* spp. 5787
 - fruit rots 4227
 - fruit storage 4226
 - Gymnosporangium* spp., annual report, Canada 3370
 - mosaic, yield reduction 4205
 - Mucor piriformis* 4285
 - necrotic spot, indicator plant selection 6642
 - Penicillium expansum*, post-harvest dips 5007
 - Phomopsis mali* 1755
 - Pseudomonas syringae*
 - flower infection 4276
 - population studies 4277
 - red mottle 4948
 - ring pattern mosaic 4948
 - stony pit 4948
 - vein yellows 4948
 - yield reduction 4205
 - Venturia nashicola*, resistance, breeding and selection 6642
 - Venturia pirina*
 - control 4212, 8393
 - post-harvest sprays 7389
 - soil pH 5785
 - virus
 - annual report, German Federal Republic 6506
 - control 7320
 - fruit symptoms 2575
 - host reactions 2528
 - tested plants
 - annual report, German Federal Republic 6505
 - EMLA scheme 2528
 - Special Stock Certification Scheme 7320
 - German Democratic Republic 7321
- Pear disorders**
 - bark necrosis, manganese toxicity 3492
 - black calyx-end, rootstock-scion relationships 7456
 - black end, calcium deficiency 3493
 - black fruit 1027
 - chlorosis
 - iron nutrition 4947
 - Yugoslavia 7457
 - core breakdown, growth substances, 2,4-D 3500

Pear disorders *contd.*

- cork, calcium deficiency 3493
- fruit russetting, manganese toxicity 3492
- internal browning 3499, 5792
- leaf browning, water relations 516
- leaf burn, weather conditions 1835
- premature ripening, temperature 1841
- scald 518
 - fruit storage 1800
 - irradiation, gamma rays 1034
 - superficial browning, fruit storage 2599
 - vascular browning 518
- Yuzuhada disorder 1031
- Pear flower**
 - bud development 5789
 - growth substances 87
 - bud initiation 2650
 - growth substances 8468
 - aminozide 1840, 4279
 - chlormequat 1840, 4279
 - GA 1840
 - inhibition, growth substances 7461
 - nitrogen nutrition 2530
 - phosphorus nutrition 2530
 - rootstocks 2530
 - soil management 2530
 - varietal differences 7460
 - development, growth substances, endogenous 4280
 - pistil, amino acids, content 5744
- Pear fruit**
 - ascorbic acid, content, varietal differences 7416
 - calcium
 - content
 - varietal differences 6606
 - Yuzuhada disorder 1031
 - colour, growth substances 3500
 - composition 7327
 - storage 5792
 - controlled atmosphere, hypobaric 7326
 - volatile constituents 5793
 - development
 - growth substances, endogenous 4280
 - temperature 6648
 - drop, growth substances 8469
 - flavour, growth substances, 2,4-D 3500
 - flower bud, initiation 2650
 - irradiation, gamma rays, post-harvest 1034
 - maturity
 - growth substances 8469
 - indices 3497
 - tests 1789-1790, 3427
 - organic acids
 - content
 - seasonal variations 6522
 - storage containers, trays, liners 1033
 - parthenocarp 2652
 - growth substances, endogenous 4280, 8470
 - pollination 6649
 - varieties 4273, 6649
 - phenols, content 1031
 - phosphorus, content, varietal differences 6606
 - pigments 58
 - potassium, content, varietal differences 6606
 - quality
 - growth substances, review 1792
 - review 6597
 - respiration, storage 5792
 - ripening 5055, 6651
 - biochemistry 3427, 3497
 - enzyme activity 88, 1031, 8472
 - ethylene, production 5791
 - growth substances 7407
 - abscisic acid 1842
 - inhibition, growth substances 7462
 - lignin, formation 1031
 - pollination 2652
 - water loss, storage 3177
 - set
 - growth substances 87, 7461
 - parthenocarpic 517
 - growth substances 8469
 - pollination 2652, 5789
 - size
 - growth substances
 - aminozide 4279
 - chlormequat 4279

Pear fruit contd.

size contd.

- pollination 2652
- rootstocks 3490
- specific gravity 8421
- stone cells, composition 7463
- sugars

content

- seasonal variations 6522
- storage containers, trays, liners 1033
- metabolism, storage 4284
- thinning, growth substances 4281
- treatment, fungicides, post-harvest 6651
- water loss, storage 3177

Pear growth substances

absorption

foliar

- abscisic acid 2885
- 2,4-D 2885
- NAA 2885, 3495
- leaf, NAA 5054

application

post-harvest

- 2,4-D 3500
- IAA 3500
- 2,4,5-T 3500

biennial bearing

- aminozide 4279
- chlormequat 4279

endogenous

- flower 4280
- fruit 1842, 4280
- parthenocarp 8470
- seasonal variations 8470
- seed 2523, 4280

flower, bud, development, CCC 87

flower bud

initiation

- aminozide 1840, 4279
- chlormequat 1840, 4279, 8468
- GA 1840
- inhibition, GA 7461

fruit

colour

- 2,4-D 3500
- IAA 3500
- 2,4,5-T 3500

drop

- fenoprop 8469
- GA 8469

flavour, 2,4-D 3500

quality, review 1792

ripening

- abscisic acid 1842
- inhibition
- 2,4-D 7462
- IAA 7462
- storage, review 7407

set

- CCC 87
- GA 7461
- parthenocarpic, GA 8469

size

- aminozide 4279
- chlormequat 4279
- thinning
- NAA 4281
- NAD 4281

leaf, removal, ethephon 6511

maturity, fenoprop 8469

responses

- aminozide 3360
- chlormequat 8468

retardants

- aminozide 4279, 6577
- chlormequat 4279, 6577

shoot

bud, development, CCC 87

growth

- aminozides 1840
- chlormequat 1840
- ethephon 1840
- GA 1840
- TIBA 1840

Pear hybrids, flower bud, initiation 7460**Pear leaf**

- area, measurement, photosynthesis, productivity 5053
- ascorbic acid, content, light intensity 3491
- cell sap, concentration, seasonal variations 916

Pear leaf contd.

- chlorophyll, content, light intensity 3491
- chlorophyll, content, rootstock effect 1032
- cuticle, growth substances, absorption 2885

flower bud, initiation 2650

growth substances, absorption 3495

nutrients, content, rootstocks 8465

removal, chemical 6510-6511

water content

planting, spacing 1030

seasonal variations 1030

wax, growth substances, absorption 5054

Pear nutrition

calcium

- fruit, disorders 3493
- plant, manganese content 3492
- copper, rootstock production 5788
- general, leaf analysis, symposium 2489
- green manures 936
- iron

chlorosis 4947

deficiency, annual report, UK 3347

manganese, rootstock production 5788

NPK, sub-tropics 1834

Pear pests*Aphanostigma piri* 7459

Australia 6518

bullfinches, protection against 86

Cacoecia podana 5738*Caliroa cerasi*, biological control 5051*Capua reticulana* 5738*Contarinia pyrivora* 5050*Cydia molesta* 1837*C. pomonella*, forecasting 1761*Janus piri* 1029

mites 3324

biological control 29

Panonychus ulmi 5738*Psylla piri* 5738*P. pyri*, control, annual report, USA 8319*P. pyricola* 8467

host-pest relationships 1838

P. spp. 1744

biological control 5051

control 5052

Tetranychus telarius 455, 5738**Pear propagation**

cuttings

shoot

age 4178

part 4178

treatment, growth substances 4178

grafting

height 5046

rootstocks, planting, spacing 7349

scions, treatment, growth substances 1833

nursery stock, defoliation 5716

Pear root

growth, mulching 936

-shoot relationships, soil pH 5048

Pear rootstocks

characteristics 84, 5782

comparative trials

New Zealand 5783

South Africa 5782, 7456

flower bud, initiation 2530

propagation, seed 8464

Pyrus spp. 1032

quince 1032

Quince A 3490

compatibility 4271

-scion relationships 5782

chlorophyll, content 1032

disease incidence 4272

disorder incidence, black calyx-end 7456

fruit, size 3490

incompatibility 5784

-scion relationships, incompatibility 5744

-scion relationships, leaf, nutrients, content 8465

-scion relationships

pistil, amino acids, content 5744

pollen, amino acids, content 5744

seedling

production 8464

propagation 8464

treatment

growth substances 5788

nutrients 5788

Pear rootstocks contd.

seedling contd.

- variability 3488
- winter hardiness 8464
- treatment, disease control, *Agrobacterium tumefaciens* 4207
- virus-tested plants, EMLA scheme 7320

Pear seed

- germination, metabolic processes 2523
- treatment, stratification, metabolic processes 2523

Pear shoot, bud, development, growth substances 87**Pear soil**

- cultivation 5047
- erosion, control 938
- fumigation
- nematode control 5728
- root growth, Ditraxex 5728
- management 5047
- methods compared 8466
- NPK contents, soil 938
- micro-organisms, soil management 937
- moisture, soil management 937
- pH 5048
- disease incidence 5048, 5785
- root-shoot relationships 5048
- structure, soil management 937

Pear varieties

- annual report, USA 3349
- comparative studies, South Africa 8322
- comparative trials, annual report, Cyprus 3345

Dawn 3486

disease resistance

- Alternaria kikuchiana* 7458
- Entomosporium maculatum* 8478
- Erwinia amylovora* 3486, 5049, 5786
- Doyenné du Comice, pollination 5789
- flower bud, initiation 7460
- fruit

- ascorbic acid, content 7416
- composition 6606

identification, shoots, nursery 3354

Kollektivnaya 2648

Kosmichskaya 2648

Magness 3486

Merton Pride 6530

Moonglow 3486

Packham's Triumph 4282

parthenocarp 4273

pollen compatibility 6649

pollination 4273

Précoce de Trévoux 6530

register, USA 3356

rootstock compatibility, Quince A 4271

Russkaya 2648

Schweizer Wasserbirne, pollination 517

Sierra 1724, 6638

storage, controlled atmosphere 6650

storage behaviour 4283, 8471

Trévoux, pollination 2652

Tunisia 4155

USSR 2521, 4269, 5045

virus-tested clones, EMLA scheme 2528, 7320

winter hardiness 5045

Peat

anthurium growing, nutrition 8875

azalea growing, nutrition 746

begonia growing, nutrition 6166

capsicum growing 4535

mulching, annual report, Sarawak 3609

casing, mushroom growing 8819

chrysanthemum growing

nutrition 6145

minor elements 4382

cucumber and gherkin growing, nutrition 7683

cut flowers growing 7855

cyclamen growing, nutrition 7893

essential oil plant growing 1417

extracts

cucumber and gherkin nutrition 5344

tomato nutrition 5344

gloxinia growing, nutrition 8894

herbs growing 7605

lettuce growing 7626

media

container-grown plants, nutrition 8941

cuttings

ornamental trees and shrubs 3838

- Peat** *contd.*
 media *contd.*
 cuttings *contd.*
 saintpaulia 8844
 trees and shrubs 8844–8845
 seed sowing
 bedding plants 7606
 vegetables 7606
 media constituent, physical properties 7291
 mulch, tea 7268, 9274
 soil amendment, *Polystichum* spp. 8931
 tomato growing
 nutrition 1284, 7784, 7786
 review 7783
 trough culture, vegetables, annual report, UK 6773
 vegetables growing 7605
 diseases 7607
 nutrition 7604, 7628
 annual report Irish Republic 5150
 minor elements 608, 4382
- Pecan**
 annual report, USA 451, 1706, 3349, 4945
 carbon dioxide, concentration, fruit, dehiscence 7466
 flowering, secondary 1038
 fungicides
 nut
 set
 benomyl 8473
 fentin hydroxide 8473
 growing, South Africa 519
 harvesting, shuck loosening, growth substances, ethephon 90
 herbicides
 injury
 diuron 5056
 terbacil 5056
 irrigation, requirements 6326
 pruning and training 3501
 report, USA 8320
 symposium 5794, 7164
 weed control 5056
 yield, correlations 1845
- Pecan diseases**
Fusicladium effusum, control 5057, 7464
 leaf scorch (various fungi) 2653
- Pecan flower**
 bud initiation
 fruit removal 1038
 leaf removal 1038
 drop 5795
- Pecan fruit**
 dehiscence
 carbon dioxide 7466
 ethylene 7465
 drop 5795
 ethylene, production 7465
 set
 fruit removal 1038
 leaf removal 1038
 thinning, growth substances, ethephon 90
- Pecan growth substances**
 fruit, thinning, ethephon 90
 shuck loosening, ethephon 90
- Pecan leaf**
 analysis, atomic absorption spectroscopy 1844
 composition, zinc 1036
 removal
 nut
 set 3502
 size 3502
- Pecan nut**
 proteins, content 4941
 set, leaf, removal 3502
 size, leaf, removal 3502
- Pecan nutrition**
 zinc
 application, methods compared 1036
 deficiency 1036–1037
 sources 1036
- Pecan pests, mites, biological control** 29
- Pecan propagation, budding, rootstocks, treatment** 2654
- Pecan rootstocks, treatment, growth substances** 2654
- Pecan varieties** 89
 fruit, composition, annual report, Tunisia 4944
- Pecan varieties** *contd.*
 register, USA 3356, 4156
 Tunisia 4155
 USA 6652
- Pectins**
 content
 bulb skin
 garlic 8745
 onion 8745
 fruit, ripening, banana 8128
- Pegamya** spp., bacteria, vectors, *Erwinia amylovora*, pear 5787
- Pelatachina tibialis**, parasite of, *Synanthedon tipuliformis*, black currant, red currant 6677
- Pellicularia filamentosa**, clonal resistance, rubber diseases 8181
- Pemphigus bursarius**
 lettuce pests 1159
 resistance, lettuce pests 3643
 varietal resistance, lettuce pests 1159
- Penicillium corymbiferum**
 fungicides, resistant strains, benomyl, lily diseases 7903
 garlic diseases 1244
- P. digitatum**
 citrus diseases, annual report, Australia 4782
 mandarin and tangerine diseases 4810
 orange diseases 4810, 9099
 post-harvest dips, orange diseases 4811
 storage dips, lemon diseases 6363
- P. expansum**
 fruit storage, apple diseases 485
 post-harvest dips
 apple diseases 5007
 pear diseases 5007
 storage diseases, apple diseases 5008
- P. oxalicum**, *Phyllanthus emblica*, diseases 7274
- P. simplicissimum**, inoculation, leaf, composition, tagetes 2207
- P. spp.**
 bulbs, diseases 6165
 camellia diseases 4686
 control
 apple diseases 7413
 lily diseases 7903
Dioscorea spp., diseases 6297
 eggplant diseases 1274
 fruit storage
 apple diseases 4224
 fig diseases 1010
 mandarin and tangerine diseases 7153
 natsudaidai diseases 6360
 grapevine diseases 579
 iris diseases, annual report, USA 6129
 leaf, micro-organisms, ozone, bean (*Phaseolus*) 6839
 lily diseases, annual report, Netherlands 6127
 orange diseases 7155
 post-harvest dips, apple diseases 986
 rot development, apple diseases 57
 seed-borne, spinach diseases 6785
 soil, micro-organisms, replanting, grapevine 1105
 storage diseases, grapevine diseases 1916
- Pennisetum clandestinum**
 grasses, lawns and sports turf 739
 soil, erosion, control 739
 weeds, lawns and sports turf 739
- P. purpureum**, weeds, sugar cane, annual report, USA 1530
- P. spp.**, as weeds, oil palm 8166
- Pentalonia nigronervosa**
 banana pests 380, 5489
 cardamoms pests 5489, 6252
 fungal parasites, cardamoms pests 6253
 vectors, bunchy top, banana pests 9132
 virus vectors, mosaic, cardamoms pests 6251
- Pentstemon fragefolii**
 strawberry pests 5079
 vectors, mottle, strawberry pests 7537
- Pentstemon**, growing, USA 5414
- Peony**, tissue culture, anther, annual report, UK 3832
- Peony plant**, anatomy 2313
- Peony propagation**
 air-layering 4613
 rhizome 4613
- Peperomia** diseases, *Colletotrichum dematium* 6203
- Peperomia growth substances**, translocation, heteroauxin 1320
- Pepper, black**
 annual report, Sarawak 3933
 essential oil
 composition
 varietal differences 1404
 volatile constituents 7069
 content, varietal differences 7978
 determination 1404, 7066
 medicinal properties 3016
 Malagasy Republic, annual report, France 754
 piperine, content, varietal differences 7978
 propagation
 cuttings
 hardwood 1408
 leaf bud 1408
 treatment
 growth substances
 IAA 1408
 IBA 1408
 NAA 1408
 quality, determination methods 7979, 8984
 research, India, review 7968
 root, anatomy 3172
 shade, disease incidence, *Elsinoë piperis* 6254
- Pepper, black, diseases**
Elsinoë piperis 6254
 alternative host, *Piper guineense* 6254
Phytophthora palmivora, control 6384
P. parasitica, control 6384
- Pepper, black, flower**
 sex
 seasonal variations 7072
 varietal differences 7072
- Pepper, black, fruit, set**, varietal differences 7072
- Pepper, black, nutrition**, manganese, toxicity 4735
- Pepper, black, pests**
Meloidogyne incognita 7977
M. javanica 7977
- Pepper, black, varieties** 7072
 essential oil, content 7978
 Frommage 4534
 piperine, content 7978
- Perennial flowers**, value, aesthetic, annual report, German Federal Republic 7844
- Perennial grasses**, as weeds, pineapple 8172
- Pereskia** spp., edible fruits 822
- Pereskopsis** spp., edible fruits 822
- Periderium harknessii**, varietal incidence, *Pinus* spp., diseases 5461
- Peridroma saucia**, control, melon (cantaloup and musk) pests 7669
- Perilla** spp.
 flower, bud initiation, photoperiodism 1347
 growth substances
 translocation
 anthesisins 4645
 gibberellins 4645
 photoperiodism, flower bud initiation 1347
- Perkinsiella saccharicida**
 predators, *Tythus mundulus*, sugar cane 1637
 sugar cane pests, annual report, Australia 9219
 virus, vectors, Fiji disease virus, sugar cane pests 1633
- P. saccharina**, vectors, fiji disease, sugar cane pests 421
- Perlite**
 cucumber and gherkin growing 7781
 media constituent, physical properties 7291
 tomato growing 7781, 8773
- Pernettya** spp.
 propagation
 cuttings
 containers, compared 3918
 media, compared 3918
Peronospora anemones, anemone diseases 2221

*Peronospora cont.**P. brassicae*

- varietal resistance
- brussels sprouts diseases 4420
- cabbage diseases 4420
- cauliflower and broccoli diseases 3654

P. destructor

- control, onion diseases 5312
- host nutrition, onion diseases 663
- onion diseases 3763
- resistance, breeding and selection, onion diseases 2830
- temperature, onion diseases 4523

P. farinosa

- host-pathogen relationships, spinach diseases 1958
- spinach diseases, annual report, German Federal Republic 7599

P. parasitica

- cabbage diseases, annual report, USA 4367
- cauliflower and broccoli diseases, annual report, UK 3610
- climate, cabbage diseases 8622
- drought, cabbage diseases 8622
- temperature, cabbage diseases 8622

P. schleidenii, onion diseases 2084*P. sparsa*, rose diseases, annual report, German Federal Republic 7843*P. spp.*

- fungicides, application, time, fruit set, grapevine diseases 6755
- grapevine diseases 3579
- leek diseases 661
- resistance, breeding and selection, grapevine diseases 4350

P. viciae

- pea diseases 1230
- annual report, UK 3611
- resistance, pea diseases, annual report, UK 5149

Perovskia spp., essential oil, composition 3949-3950

Persimmon

- carbon dioxide, fruit, astringency 5594
- ethylene, fruit, ripening 4045
- fungicides 3320
- growing, Philippines 820
- hurricane, damage, disease incidence 4827
- insecticides 3318
- residues 3328
- arsenic 3329
- lead, residues 4936
- light

intensity

- fruit, drop 3168
- photosynthesis 7325

photosynthesis 7325

pruning and training 2431

trellising, growth correlations 6639

ringing, fruit, drop 3168

storage, controlled atmosphere 5002

tissue culture, callus, grafting

compatibility studies 3567

Persimmon diseases, *Cephalosporium*

- diospyri*, incidence, hurricane damage 4827

Persimmon fruit

- astringency, carbon dioxide treatment 5594
- colour, growth substances, GA 3169
- drop
- light intensity 3168
- ringing 3168
- firmness, growth substances, GA 3169
- flavour, growth substances, ethephon 1525
- proteins, content, seasonal variations 2432
- ripening, growth substances, ethephon 4045
- storage life, growth substances, GA 3169
- sugars, content, seasonal variations 2432
- tannins, content, seasonal variations 2432
- Persimmon growth substances
- fruit
- colour, GA 3169
- firmness, GA 3169
- flavour, ethephon 1525
- ripening, ethephon 4045
- storage life, GA 3169

Persimmon leaf

- nitrogen, content 4029
- phosphorus, content 4029
- potassium, content 4029
- temperature, photosynthesis 7325

Persimmon nutrition, NPK 4029

Persimmon pests, *Tenuipalpus japonicus* 821

Persimmon propagation, budding, time of 8115

Persimmon root, growth, pruning and training 2431

Persimmon varieties

- comparative trials, annual report, USA 8051
- Izu 2430

Pest, incidence, plant nutrition 865

Pestalotia guepini, azalea diseases 7046*P. microspora*, host-pathogen relationships, ivy diseases 5464*P. quepina*, olive diseases 3166*P. scirtofaciens*, sapodilla diseases 2464*P. spp.*, epiphyte, pecan 2653*Pestalotiopsis versicolor*

- host nutrition, azalea diseases 6225
- relative humidity, azalea diseases 6225
- temperature, azalea diseases 6225

Pestalozzia theae, NPK nutrition, tea diseases 4897

Pesticides

- residues, report, German Federal Republic 8284
- various
- residues
- fruit 4935
- vegetables 4935

Pests

control

- biological, review 4930
- economics 2501
- hormone mimics 4121
- plant breeding 2501
- Proceedings, Conference, North Carolina State University 2501
- crop losses, assessment methods 1692
- forecasting
- Argyrotaenia pulchellana*, grapevine 580
- Carposina niponensis*, apple 1757
- Cydia pomonella*
- apple 1761
- pear 1761
- light traps, tortricids 1764
- male traps, *Cydia pomonella*, apple 1766
- Panonychus ulmi*, apple 1757
- Pseudococcus comstocki*, apple 1757

host-parasite relationships, cucurbitacin, content, cucurbits 1194

resistance

- plant analysis
- brussels sprouts 1697
- chrysanthemum 1697

sterilization, irradiation, gamma rays, *Acanthoscelides obtectus*, bean

(Phaseolus) 2024

Pettilium spp., growing 5440

Petunia

- air pollution, sulphur dioxide, ethylene, injury 6132
- annual report
- UK 3832
- USA 3835, 8839
- ascorbic acid, applied, interaction, growth substances 6152
- cytology, vegetative apices, floral apices, petals 2855
- dwarfing
- growth substances 5390
- ancymidol 2931
- enzyme activity, flower 3851
- enzymes, flower 3851
- ethylene, injury, annual report, Netherlands 6961
- growing, Finland 8843
- growth 707
- herbicides, responses 8852
- ozone
- injury 1322, 4633
- prevention, growth substances 6152
- varietal resistance 6152
- pollen
- composition, ozone, injury 1340

Petunia cont.

pollen cont.

germination, ozone, injury 1340

Petunia, pollen, germination, RNA, synthesis 275

Petunia

pollen

- protoplasts, isolation 2202
- structure, ozone, injury 1340

pollen tube

- growth 6155
- nuclei 6155

seedling

- production, temperature 276
- raising

- pots, types compared 5390
- soil blocks, annual report, Netherlands 1314

sulphur dioxide, injury 1322

temperature, seedling production 8843

tissue culture

- flower bud 8872
- leaf, growth substances, treatment 871

pollen 707, 6153

protoplast, callus formation 6154

shoot, growth substances, treatment 871

water relations, minor elements, nutrition 1343

weed control 2171, 8852

Petunia diseases, *Fusarium spp.* 722

Petunia flower

- amino acids, content, male sterility 7870
- dormancy 6986

- breaking, growth substances 6986
- formation, minor elements, nutrition 1343

male sterility 7870

Petunia growth substances

application

- with ascorbic acid, aminozide 6152
- wax coatings, aminozide 6152

dwarfing

- ancymidol 2931
- Pydanon 5390

flower dormancy, breaking, GA 6986

leaf

development

- BA 7871
- 2,4-D 7871
- IAA 7871
- kinetin 7871
- NAA 7871
- zeatin 7871

ozone injury

prevention

- aminozide 6152
- Phosfon-D 6152

pest control, *Trialeurodes vaporariorum*,

aminozide 3850

retardants, Pydanon 2163

shoot

development

- BA 7871
- 2,4-D 7871
- IAA 7871
- kinetin 7871
- NAA 7871
- zeatin 7871

Petunia nutrition

boron, application, foliar 1343

fertilizers

- liquid 1342
- slow-release 1342
- manganese, application, foliar 1343
- nitrogen 6133
- zinc, application, foliar 1343

Petunia pests, *Trialeurodes vaporariorum*,

control, growth substances, aminozide 3850

Petunia seed

- germination, temperature 8843
- production, minor elements, nutrition 1343
- sowing, direct, in pots, pelleted 2165
- treatment, pelleted 2165

Petunia varieties

- annual report, Netherlands 6127
- comparative trials 1341

ozone, injury, resistance 6152

Peucedanum grande, coumarins, content 5530

- Pezicula alba*, apple diseases, annual report, Netherlands 5698
- P. malicorticis*
apple diseases, annual report, Netherlands 5698
incidence, apple diseases 5009
- P. spp.*, apple diseases, annual report, Netherlands 5697
- Phaeophleospora indica*, sapodilla diseases, annual report, India 4034
- Phalaenopsis* spp.
carbohydrates, metabolism 5458
diseases
virus 6208
annual report, German Federal Republic 8837
enzyme activity, seedling 5458
flower, development 8938
- Pharbitis* spp.
flower
bud initiation, light 3848
development, growth substances 7869
growth substances
endogenous, flower 7869
flower
development
GA 7869
IAA 7869
light, intensity, flower bud, initiation 3848
- Phaseolus angularis*, growing, New Zealand 5976
- Pheidole megacephala*, predator on, *Rhabdoscelus obscurus*, sugar cane 5653
- Phenolic compounds**
content
disease resistance, *Ceratocystis fimbriata*, cacao 9140
fruit
grapevine 1931, 3600-3601
Rhizopus arrhizus, apricot 2616
Ziziphus spp. 858
leaf
disease resistance
Alternaria kikuchiana, pear 6645
Ceratocystis fimbriata, coffee 4055
Sphaerotheca mors-uvae, black currant 6675-6676
flower bud initiation, olive 9111-9112
olive 2427
ornamental trees and shrubs 744
Pyrus spp., hybrids 1839
seasonal variations, olive 9111
orange 4802
plant
disease resistance, *Colletotrichum capsici*, capsicum 5325
Echinoideae 4727
root, disorder resistance, sudden dieback, oil palm 6412
shoot, tea, annual report, Sri Lanka 8262
determination, fruit, grapevine 7594
leaf, seasonal variations, *Pyrus* spp. 6646
metabolism, disease resistance, apricot 1805
shoot, seasonal variations, *Pyrus* spp. 6646
- Philophora cinerescens*
carnation diseases 715
annual report, Netherlands 6126, 6961
- P. spp.*, carnation diseases 714
- Philadelphus**
essential oil, production, USSR 7082
growing, for essential oil production, USSR 7082
- Philadelphus flower**, bud initiation 2996
- Philadelphus varieties**, USSR 6241
- Philodendron**
annual report, USA 8834
growing
media
annual report, Belgium 8835
coal ash 8857
potting composts
amendments 4679
types compared 4679
- Philodendron diseases**, *Xanthomonas dieffenbachiae* 7027
- Philodendron flower**, temperature 7935
- Philodendron nutrition** 4679
- Philodendron potting composts**
amendments 4679
types compared 4679
- Philodendron spp.**
nutrition
major elements, plant, analysis 1376
minor elements, plant, analysis 1376
plant, composition, major and minor elements 1376
- Phleum pratense*, lawns and sports turf, breeding and selection, disease resistance 6195
- P. spp.*
lawns 2967
lawns and sports turf
breeding and selection 3884
irrigation, requirements 8915
weed incidence 8915
orchard tracks 3890
- Phlojodicarpus villosus*, coumarins 6283
- Phlox varieties**, USSR 2157
- Phoenix** spp.
composition 6372
sap, extraction 6372
sugars, content 6372
vitamins, content 6372
- Pholiota mutabilis*, edible fungi 6958
- Phoma betae*, seed treatment, beetroot diseases, annual report, UK 1934
- P. destructiva*
host ascorbic acid, content, tomato diseases 6106
host-pathogen relationships
amides, tomato diseases 4573
amino acids, tomato diseases 4573
host sugars, content, tomato diseases 6106
incidence, tomato diseases 1289
- P. exigua*, chicory diseases 8601
- P. lingam*
brassicas, diseases, annual report, UK 1934
cabbage diseases 4425
- P. rostrupii*, host enzyme activity, carrot diseases 2897
- P. spp.*, epiphyte, pecan 2653
- P. strasserii*, host-pathogen relationships, mint diseases 759
- P. telephii*, *Sedum* spp., diseases 1374
- Phomopsis juniperovora*, juniper diseases 5463
- P. mali*
apple diseases 1755
cherry diseases 1755
pear diseases 1755
- P. osmanthi*, olive diseases 3166
- Phomopsis sclerotoides**
cucumber and gherkin diseases 1191, 8655
annual report
Canada 3603
German Federal Republic 8579
cucurbits, diseases 1192
soil temperature, cucumber and gherkin diseases 8655
- P. spp.*
cucumber and gherkin diseases, annual report, Belgium 5148
Elaeagnus angustifolia, diseases 4719
infection process
apricot diseases 7449
cherry diseases 7449
peach diseases 7449
plum diseases 7449
storage dips, lemon diseases 6363
- P. theae*
control, cultural methods, tea diseases 5662
fungicides, absorption, tea diseases 6460
tea diseases, annual report, Sri Lanka 8262
- P. vexans*
resistance, eggplant diseases, annual report, India 3607
varietal resistance, eggplant diseases 5329
- Phomopsis viticola**
control, grapevine diseases 8560-8562
grapevine diseases, annual report, German Federal Republic 4298, 6669
- Phorbia platura*, bean (*Phaseolus*) pests, annual report, German Federal Republic 7598, 8579
- Phorodon humuli**
control, hop pests 5511-5512, 7094
hop pests 3041, 4748
annual report
German Federal Republic 7064
UK 2330, 3040, 9009
insecticide resistance, hop pests 3046
predators, hop pests, annual report, UK 3954
resistance, hop pests, annual report, UK 3954
- Phosphorus**
absorption
aluminium nutrition
sugar cane 7252
tea 6458
cabbage nutrition 145
calcium nutrition, tomato 6911
coffee 6404
dormancy, conifers 3909
drought, oil palm 4071
fertilizers compared, spinach 5903
fruit, set, mandarin and tangerine 3111
growth substances, tomato 6094
herbicides, trifluralin, tomato 8770
humates, tomato 8774
nitrogen metabolism, grapevine 5866
nitrogen nutrition
apple 466
peach 466
nutrient solution
bicarbonate
bean (*Phaseolus*) 7787
tomato 7787
onion 5307-5309
orange 6342-6343
peat pH, chrysanthemum 6145
pest incidence, *Meloidogyne* spp., tomato 2878
potassium nutrition, beetroot 2745
soil fumigation, avocado 8055
soil steaming, avocado 8055
tea, 4113
water table, *Vaccinium* spp. 6686
alkaloids, content, poppy 7112
aluminium toxicity, pea 7728
application
foliar, almond 8333
time, eggplant 6898
availability
cabbage 8619
sugar cane, annual report, USA 9221
vegetables 120
calcium content, cucumber and gherkin 6826
content
aluminium nutrition, bean (*Phaseolus*) 5974
biennial bearing, apple 970
copper nutrition, coffee 393
flower, peach 6631
fruit
development, plum 6663
nitrogen nutrition, strawberry 8513
peach 6631
potassium nutrition, orange 3157
tomato grafted on potato 8796
leaf
apple 6553
biennial bearing, apple 2589
fruiting, olive 8112
mandarin and tangerine 7133
nitrogen nutrition, sources, peach 3470
nutrient source, *Agrostis* spp. 3893
seasonal variations
apple 6554
olive 8112
peach 508, 6630
soilless culture, grapevine 6749
sugar cane 7252
tea 8271
annual report, Sri Lanka 8262
temperature, pea 2060
varietal differences, apple 6554
nitrogen nutrition, tea 6457
plant
aluminium nutrition, tea 6458
diseases, tomato 3804, 7798

Phosphorus contd.

- content *contd.*
- plant *contd.*
 - fruiting, fruit trees and plants 5705
 - growth substances, pea 1238
 - seasonal variations, peach 508
- root
 - biennial bearing, apple 2589
 - growth substances, pea 3746
 - nitrogen nutrition, tea 8270
 - sugar cane 7252
- seed, size, pea 1228
- shoot
 - root temperature, chrysanthemum 8863
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
- tuber, tomato grafted on potato 8796
- zinc nutrition, grapevine 1912
- copper content, grapevine 6751
- copper toxicity, grapevine 6753
- darkness, tomato 5356
- deficiency
 - amino acids, metabolism, pumpkin 161
 - coffee 9166
 - cranberry nutrition 1062
 - mandarin and tangerine 8071
 - nutrient absorption, mint nutrition 337
 - symptoms
 - coffee 3198
 - ginger 5492
 - rubber 3253
 - tomato 4567
 - tomato 4567
- determination, methods 8289
- disease development
 - Fusarium solani*, bean (*Vicia*) 4489
 - Rhizoctonia solani*, bean (*Vicia*) 4489
- disease incidence, tomato 241
- disorder incidence, low temperature breakdown, apple, annual report, UK 8317
- flower, development, fruit trees and plants 5705
- flower bud
 - fruiting potential, grapevine 3578
 - initiation, tree fruits 2530
- flowering
 - apple 7368
 - date, chamomile 3972
- frost resistance, black currant 8485
- fruit
 - amino acids, content, capsicum 6039
 - ascorbic acid, content, mandarin and tangerine 8072
 - capsaicin, content, capsicum 8752
 - composition
 - apple 6557
 - orange nutrition 1478
 - nitrogen, content, capsicum 8753
 - organic acids, content, mandarin and tangerine 8072
 - proteins, content, capsicum 8753
 - set, black currant 1860, 8485
 - size
 - mandarin and tangerine 8072
 - peach 508
 - storage life, apple 6557
 - sugars, content, grapevine 7565
- interaction, growth substances, pea 2068
- iron deficiency, macadamia 6374
- leaf
 - amino acids, content, capsicum 6039
 - composition
 - grapefruit 2384
 - lemon 2384
 - orange 2384
 - copper, content, apple 1742
 - fall, grapevine 6751
 - fruit, amino acids, content, capsicum 6039
 - nitrogen, content, capsicum 8753
 - proteins, content, capsicum 8753
 - zinc, content, apple 1742
- leaf analysis
 - apple 3402, 7368, 8375
 - black currant nutrition 1860
 - carrot 6109
 - chrysanthemum 7856
 - citrus 1484
 - coffee 1570, 3198
 - lettuce 5183

Phosphorus contd.

- leaf analysis *contd.*
- mandarin and tangerine 7133
- mango 5631
- orange nutrition 1478
- peach 1018, 3472
- petiole analysis compared, grapevine 8551
- rubber 1616, 3253
- seasonal variations, annual report, India 1657
- v soil analysis, coffee 3195
- soil management methods compared, apple 8358
- sugar cane 412, 9247
- manganese absorption, avocado 8055
- metabolism
 - bean (*Phaseolus*) 4470
 - humates, tomato 8774
 - humic acid
 - cucumber and gherkin 684
 - tomato 684
 - nitrogen, grapevine 7581
 - pea 2071
 - pumpkin 2071
 - silicon nutrition, sugar cane 7252
 - temperature, apple 7401
 - molybdenum nutrition, pea 5272-5273
 - mycorrhiza relationships, onion 6880
 - net assimilation rate, lettuce 3649
 - nitrogen content, pea 5273
 - nitrogen nutrition
 - pea 7728
 - pineapple 9199
 - nucleic acids, metabolism, carrot, tissue culture 1307
- nutrition, amino acids, content, capsicum 1269
- pest incidence, pea nutrition 1232
- petiole analysis, leaf analysis compared, grapevine 8551
- photosynthesis, tomato 6907
- placement
 - methods compared, root growth, apple 8377
 - rose 3951
 - tea 3276
- plant analysis
 - grapevine 7566
 - sugar cane 6437
 - potassium absorption, beetroot 2745
- potassium content
 - cucumber and gherkin 6826
 - persimmon 4029
- potassium nutrition
 - mandarin and tangerine 9083
 - pineapple 9199
- proteins, biosynthesis, pea 6005
- requirements, vegetables 4381
- residues from straw burning, iris nutrition 2243
- rhizosphere
 - micro-organisms
 - cabbage 8620
 - tomato 8620
- root
 - composition
 - pea 2071
 - pumpkin 2071
 - shape, carrot 6941
 - soil adsorption, lettuce 5183
 - soil analysis
 - cabbage, chinese 7629
 - lettuce 7629
 - rubber 1616
 - soil management methods compared, apple 8358
 - sugar cane 9247
- soil fumigation injury, avocado 8055
- sources
 - cabbage 8619
 - compared
 - grapevine 7566
 - tea 7270
 - tomato 8777
 - cucumber and gherkin 3802
 - fluorine toxicity, freesia 2233
 - tea nutrition, annual report, India 1657
 - tomato 3802
- toxicity, coffee 4859
- translocation
 - bean (*Phaseolus*) 2028, 2796

Phosphorus contd.

- translocation *contd.*
- biennial bearing, apple 2589
- coffee 6404
- curly top virus, tomato 1294
- marrow, annual report, UK 5943
- nutrient solution
 - bicarbonate
 - bean (*Phaseolus*) 7787
 - tomato 7787
- peach 3478
- pest incidence, *Meloidogyne* spp., tomato 2878
- tea 4113
- temperature, bean (*Phaseolus*) 2028
- Phytinia spp.**
- leaf
 - anthocyanins, content, respiration 8944
 - colour, respiration 8944
 - propagation, cuttings, media 3838
 - respiration, leaf, colour 8944
- Photographic**
- surveys
 - citrus, annual report, USA 791
- ground cover
 - melon (cantaloup and musk) annual report, USA 600
 - onion, annual report, USA 600
- nutrient toxicity, citrus, annual report, USA 790
- statistical techniques, annual report, USA 790
- Photoperiodism (see also Light)**
- amino acids, biosynthesis, *Salvia sclarea* 7085
- begonia 8885
- bolting, leek 5300
- boron
 - absorption, sugar cane 4102
 - deficiency, symptoms, tagetes 5416
- bulb
 - development
 - leek 5300
 - onion 3767
 - initiation
 - ethylene, onion 2086
 - onion 2832
 - ripening
 - onion 2832
 - shallot 602
- bulblet, formation, begonia 6168
- carbohydrates, content, okra 8749
- chrysanthemum, annual report, Belgium 5386
- cold resistance
 - pyracantha 5485
 - weigela 5485
- cuttings
 - leaf, begonia 2223
 - shrubs 1401
- dwarfing
 - lily 2252
 - Salvia* spp. 1348
- enzyme activity
 - impatiens 7884
 - organic acids metabolism, *Kalanchoe* spp. 8926
 - spinach 129
- enzymes, content, *Kalanchoe* spp. 7933
- ethylene, production, cucumber and gherkin 3688
- flower
 - development, chrysanthemum 6148
 - quality, carnation 6968
- flower bud
 - initiation
 - begonia 1356, 6168
 - carnation 5402, 6142
 - chrysanthemum 7858
 - coffee 4864
 - cyclamen 8887
 - Echeveria* spp. 8925
 - eggplant 8762
 - Kalanchoe* spp. 3902
 - mustard 331, 333
 - nucleic acid content, morning glory 2201
 - okra 8749
 - ornamentals 6200
 - pea 7745
 - Perilla* spp. 1347
 - plant age, chrysanthemum 7857

Photoperiodism *contd.*

- flower bud *contd.*
 - initiation *contd.*
 - Schlumbergera* spp. 309
 - Sedum* spp. 8932
 - strawberry, annual report, UK 1856
 - sugar cane 9264
 - tomato 6925
 - Xanthium* spp. 1347
- flowering
 - Aeschynanthus* spp. 7951
 - alstroemeria 6990, 7875
 - Bassella alba* 602
 - chrysanthemum 3296
 - date
 - carnation 6968
 - chrysanthemum, annual report, UK 4605
 - Limonium* spp. 6996
 - Saccharum* spp. 1646
 - Salvia* spp. 1348
 - sugar cane 8250
 - Euphorbia fulgens* 6237
 - holly 6215
 - lily 3870, 4658
 - onion 602
 - poinsettia 3914
 - secondary, strawberry 3555
 - sugar cane 2465
 - Zygocactus* spp. 7028
- forcing, strawberry 5820
- frost resistance, black currant 4310, 6671
- fruit, composition, tomato 602
- fruiting
 - autumn, strawberry 1889–1890
 - strawberry 8521–8523
- growth
 - holly 6215
 - lily 3870, 4658
 - tomato 6925
- growth substances
 - endogenous
 - blueberry 3530
 - grapevine 6759
- interaction
 - growth substances, impatiens 7883
 - light
 - intensity
 - rose 6230
 - tagetes 2217
 - temperature
 - tagetes 2217
 - begonia 1356, 6168
 - lettuce 1975
 - Malvaviscus arboreus* 5484
 - onion 602
 - ornamentals 6200
 - rose 6230
 - latitude 5678
- leaf
 - composition, apple 50
 - senescence, *Tabernaemontana* spp. 8969
- light
 - sources
 - compared
 - capsicum 236
 - lily 3870, 4658
 - trees and shrubs 5485
- nitrate accumulation, vegetables 1144
- nitrogen
 - metabolism
 - capsicum 8754
 - melon (cantaloup and musk) 8754
 - orange 8754
- ornamental plants, annual report, USA 6129
- photosynthesis, grapevine 2725
- pinching, poinsettia 3914
- plant
 - composition, sapogenins, *Dioscorea* spp. 356
 - growth, pea 8726
 - proteins, biosynthesis, *Salvia sclarea* 7085
- responses, vegetables, annual report, Irish Republic 5150
- root
 - composition, carrot 5375
 - development, trees and shrubs, annual report, USA 3835
 - exudate, bean (*Vicia*) 7725
 - growth, leek 5300

Photoperiodism *contd.*

- root *contd.*
 - metabolism, bean (*Vicia*) 7725
 - second crop
 - induction
 - strawberry
 - annual report
 - Netherlands 6670
 - UK 3533
 - strawberry 8521–8523
 - shoot
 - growth
 - black currant 104
 - Sedum* spp. 8932
 - tea 4901
 - sugars, biosynthesis, *Salvia sclarea* 7085
 - tuber, development, dahlia 4653
 - varietal behaviour, sugar cane 8250
 - water relations
 - grapevine 2725
 - sugar cane 4102
 - winter hardiness, tree fruits, annual report, Canada 8314
- Photosynthesis** 3, 3296, 3332
- air movement, apple 3413
 - annual report, Australia 6769
 - apple, annual report, UK 8317
 - bean (*Phaseolus*) 184
 - bean (*Vicia*) 202
 - carbon dioxide uptake
 - apple 6573
 - bean (*Phaseolus*) 5984
 - mechanism, geranium 2508
 - varietal differences, apple 3412
 - carbon monoxide, sugar cane 9261
 - chloroplast, number, brassicas 8628
 - citrus, annual report, Australia 1466
 - cold treatment, sugar cane 8247
 - crown foliar density, apple 7395
 - after dark treatment, bean (*Phaseolus*) 5985, 8694
 - diseased plants
 - Luffa* spp. 3684
 - sugar cane 8247
 - tomato 6095
 - diurnal fluctuations, beetroot 124
 - drought, temperate tree fruits 908
 - environmental factors, tree fruits 7325
 - enzyme activity
 - capsicum 6044
 - sugar cane 8248, 9260
 - far red light, vegetables 7806
 - fluorescence 1673
 - fruiting relationships
 - apple 4991, 6573
 - coffee, annual report, Kenya 3191
 - tomato 4579
 - gas exchange ratio
 - cauliflower and broccoli 2915
 - ornamental plants 2915
 - growth substances
 - bean (*Phaseolus*) 2799
 - strawberry 5819
 - herbicides, tea 8265
 - inhibition
 - anti-transpirants, vegetables 3333
 - frost, injury, cucumber and gherkin 2003
 - irrigation, grapevine 4344
 - leaf age, mandarin and tangerine 5568
 - leaf-fruit relationships, apple 5745
 - leaf growth, capsicum 6044
 - leaf nitrogen content, mandarin and tangerine 5568
 - leaf tearing
 - Musa* spp. 382
 - Strelitzia* spp. 382
 - leaf temperature, tree fruits 7325
 - light intensity
 - apple 3413, 7395
 - bean (*Phaseolus*) 2025, 2793
 - celery 2901
 - greenhouse crops 5683
 - potassium nutrition, cucumber and gherkin 5958
 - rhubarb 2901
 - tree fruits 7325
 - manganese nutrition, grapevine 1111
 - measurement, methods, tissue culture, cucumber and gherkin 4457
 - measurement equipment, types compared 8292
 - nitrogen nutrition, tomato 6907

Photosynthesis *contd.*

- optimal leaf area, grapevine 5823
 - osmotic pressure, nutrient solution, soilless culture, grapevine 6749
 - oxygen concentration
 - bean (*Phaseolus*) 2025, 7709
 - radish 7709
 - ozone, bean (*Phaseolus*) 8681
 - phosphorus nutrition, tomato 6907
 - physiology 4
 - bean (*Vicia*) 4491–4492
 - tomato 4578
 - plant nutrition
 - citrus 9100
 - strawberry 5815
 - vegetables 8693
 - productivity
 - estimation
 - gooseberry 2681
 - pear 5053
 - propagation methods, grapevine 1092
 - pruning and training, apple 4185, 4192, 7395
 - red light, vegetables 7806
 - respiration 3296
 - leaf
 - bean (*Phaseolus*) 7709
 - radish 7709
 - plant, bean (*Phaseolus*) 188
 - root, relationships, lemon 6353
 - root hydrostatic pressure, capsicum 8755
 - rootstock–scion relationships, apple 7356
 - rootstock vigour, apple 2573
 - seasonal variations, ivy 3913
 - seedling, seed treatment, raspberry 5807
 - seedling variation, oil palm 9184
 - shoot
 - relationships, lemon 6353
 - ringing, lemon 6353
 - soil moisture
 - beetroot 6092
 - spinach beet 6092
 - tomato 6092
 - soil pH, *Schizandra chinensis* 8968
 - study, apparatus 870
 - sunlight utilization, grapevine 8565
 - temperature
 - bean (*Phaseolus*) 5984–5985
 - greenhouse crops 5683
 - ivy 3913
 - Tillandsioideae 305
 - toxins, fusaricocin, bean (*Phaseolus*) 3712
 - transpiration, bean (*Phaseolus*) 2793
 - vegetables, annual report, Australia 1133
 - water relations
 - peach, annual report, Australia 450
 - tea 4112
- Phragmidium mucronatum**
- rose diseases 6228
 - annual report, German Federal Republic 6959, 7843
 - varietal resistance, rose diseases 8950
- P. spp.**, varietal resistance, rose diseases 4709
- Phthorimaea operculella**, control, tomato pests 6921
- Phyla nodiflora**, ground cover plants, growth retardants 6157
- Phyllachora musicola**, varietal resistance, banana diseases 1540
- Phyllanthus acidus** pests, *Aleyrodes sizoukinensis* 2481
- P. emblica**
- ascorbic acid, content, *Penicillium oxalicum* 7274
 - diseases, *Penicillium oxalicum* 7274
- Phyllocnistis citrella**
- citrus pests 367
 - disease complex, citrus pests 5562
- Phylloctes abaeus**, plum pests 2658
- Phyllocoptruta oleivora**
- citrus pests 3137
 - control, orange pests 8080
 - orange pests 6349
- Phyllosticta gerberae**, gerbera diseases 2200
- P. phaseolina**, symptoms, bean (*Phaseolus*) diseases 7706
- P. prunicola**
- fruit trees and plants, diseases 6657
 - grapevine diseases 6657
 - ornamental plants, diseases 6657
 - plum diseases 6657

Phyllosticta contd.

P. spinacea, varietal resistance, spinach diseases 7616

Phyllotreta spp., annual report, Sarawak, vegetables, pests 3609

Phylloxera spp.

arboricides, grapevine pests 581

control

cultural methods, grapevine pests 6723

grapevine pests 7578

host cytology, grapevine pests 8564

resistance

breeding and selection, grapevine pests

5825

grapevine pests 7577

rootstock resistance, grapevine pests

6721

varietal resistance, grapevine pests 8564

P. vastatrix

book 574

leaf metabolism, grapevine pests 7579

P. vitifoliae

grapevine pests 2724

integrated control, grapevine pests 1921

population survey, South Africa,

grapevine pests 4352

predators, *Trichobius* spp., grapevine

pests 1921

resistance, grapevine pests 2728

Phymatopterichum omnivorum

apple diseases 4257

peach diseases 4257

Physalospora malorum, control 8305

P. obtusa

apple diseases 1749

control, cultural methods, apple diseases

7380

incidence, apple diseases 6569

P. rhodina, mango diseases 1593

P. spp., control, apple diseases 7413

P. tucumanensis, sugar cane diseases, annual

report, USA 9221

***Physocarpus* spp.**

root

development, soil temperature 3925

growth, soil temperature 3925

soil

temperature

root development 3925

root growth 3925

***Physostegia* spp.**

flower

cut

preservatives 4611

vase life 4611

Phytoalexins

biosynthesis, bean (*Phaseolus*) 7719,

8688

capsicum 7763

citrus, annual report, Italy 8050

horticultural crop, review 4137

production

bean (*Phaseolus*) 7705

capsicum 1268

tulip bulb 736

tulip flower 736

Phytochrome

biosynthesis, pea 5285

book 5687

chlorophyll

biosynthesis, mustard 3021

metabolism, mustard 3021

-chlorophyll relationships 4937

bean (*Phaseolus*) 7715

degradation

light

coloured

Amaranthus spp. 3736

Mirabilis spp. 3736

pea 3736

determination, spectrophotometric method

2766

growth substances, endogenous, pea 4514

leaf, movements, *Albizia* spp. 5265

system

light, supplementary, lily 4658

photoperiodism, lily 4658

Phytomyza atricornis, pea pests 652-653

Phytoncides

lemon 3129

Panax ginseng 6305

Phytophthora cactorum

apple diseases 7382

***Phytophthora cactorum* contd.**

incidence, gooseberry diseases, annual

report, German Federal Republic

6669

resistance, seasonal variations, apple

diseases 7381

strawberry diseases 1071

annual report

Belgium 1060

Netherlands 5073, 6670

UK 3514

varietal resistance, apple diseases 7381

P. capsici

phytoalexins, production, capsicum

diseases 1268

resistance, breeding and selection,

capsicum diseases 4531

P. cinnamomi

container-grown plants, diseases, annual

report, UK 8838

fruit trees and plants, diseases 7318

grapevine diseases 7576

host nutrition, azalea diseases 6225

incidence, South Africa, grapevine diseases

5130

nursery stock, diseases 7318

relative humidity, azalea diseases 6225

resistance, breeding and selection,

blueberry diseases 5090

temperature, azalea diseases 6225

trees and shrubs, annual report,

Netherlands 4604

Venezuela, avocado diseases 9071

***P. cinnamomi*, *Chamaecypris* spp., diseases,**

annual report, Netherlands 6961

***P. citricola*, varietal resistance, hop diseases,**

annual report, UK 3954

Phytophthora citrophthora

citrus diseases 2392, 4001

fruit composition, lemon diseases 6347

hybrid resistance, citrus diseases 6329

infection source, irrigation water,

grapefruit diseases 9094

pineapple diseases 3249

respiration, fruit, lemon diseases 3153

rootstock resistance

citrus diseases 4787

annual report, Australia 4782

soil, fumigation, citrus diseases 4787

P. cryptogea

gerbera diseases 1338

annual report

German Federal Republic 6959

Netherlands 6127

spinach diseases, annual report, German

Federal Republic 7599

P. fragariae

detection, strawberry diseases 1074

resistance, breeding and selection,

strawberry diseases 7520

strawberry diseases

annual report

Belgium 1060

Netherlands 5073, 6670

UK 3514

varietal resistance, strawberry diseases

7524-7525

P. infestans

alternative hosts, tomato diseases 3806

bacterial fertilizers, tomato diseases 6074

enzyme activity, fruit, tomato diseases

2891

fruit composition, tomato diseases 2891

nitrogen nutrition, tomato diseases 5345

resistance, tomato diseases, annual report,

Netherlands 6772

tomato diseases

annual report

German Federal Republic 7597

Irish Republic 1939

varietal resistance, tomato diseases 3787,

6900

P. megasperma

apoplexy relationships, stone fruits 454

bean (*Vicia*) diseases, annual report, UK

5153

P. nicotianae

pineapple diseases 3249

control, saintpaulia diseases 7889

incidence, saintpaulia diseases, annual

report, German Federal Republic

8837

macadamia diseases 2418

***Phytophthora nicotianae* contd.**

saintpaulia diseases 8878

tomato diseases 6087

annual report, Netherlands 6772

P. palmivora

alternative host, banana, cacao diseases

830

banana diseases 830

cacao diseases 3182, 4846

annual report, Ghana 7177

clonal resistance, rubber diseases 8181

coconut diseases

annual report

Jamaica 4851

Sri Lanka 7185

control

pepper, black, diseases 6384

rubber diseases 6384

host reactions, cacao diseases 8136

incidence, cacao diseases 3183

nursery stock, cacao diseases 8135

pod anatomy, cacao diseases 1552

resistance

breeding and selection, cacao diseases

9139

pepper, black, diseases, annual report,

Sarawak 3933

review, cacao diseases 386

rubber diseases 8184

P. parasitica

citrus diseases 2392

control, pepper, black, diseases 6384

guava diseases 4063

annual report, India 4034

hybrid resistance, citrus diseases 6329

resistance, tomato diseases, annual report,

India 3607

rootstock resistance, citrus diseases 4787

soil, fumigation, citrus diseases 4787,

6348

tomato diseases, annual report report,

Canada 3603

P. porri

leek diseases 661

onion diseases, annual report, Netherlands

6772

P. spp.

apple diseases, annual report, UK 8318

avocado diseases, annual report, St. Lucia

8056

cacao diseases, annual report, Nigeria

4035

capsicum diseases, annual report, USA

4367

citrus diseases 2392

P. spp.*, citrus diseases 4803**P. spp.***

citrus diseases

annual report

Sabah 9075

USA 2375

control, cacti, diseases 8921

host amino acids, content, orange diseases

2393

host enzyme activity, tomato diseases

3788

hybrid resistance, tomato diseases 672

ornamental plants, diseases 2162

planting density, cacao diseases 8133

resistance, tomato diseases 3788

rootstock resistance, apple diseases, annual

report, Canada 3370

soil, fumigation, raspberry diseases 5087

tomato diseases, annual report, UK 8583

varietal resistance, *Chamaecypris* spp.,

diseases 1387

***P. syringae*, apoplexy relationships, stone**

fruits 454

Phytoseiulus persimilis

predator on

Tetranychus telarius

acaricide resistance 18

cucumber and gherkin 1193, 7687

rose 4711

tomato, annual report, UK 8583

vegetables 7802

Phytotoxins, symposium 4928***Picea pungens***

taxonomy, terpenes, content 2983

varieties, identification, chemotaxonomy

- Picea spp. contd.**
 propagation
 cuttings, treatment, growth substances 3910
 cuttings rooting capacity, growth substances, endogenous 3910
- Picramnia pentandra**, terpenoids, content 2340
- Pieris rapae**
 biological control, cabbage pests 1172, 4427, 7657
 cabbage pests 1172
 annual report, Canada 1944, 2734, 5883
 control, cabbage pests 7657
- P. spp.**
 brassicas, pests, annual report, German Federal Republic 8579
 cabbage pests 5195
 enzyme activity, determination 1063
 growing 7040
- Pigments (see also Chlorophyll)**
 biosynthesis
 carbohydrates, rose 1394
Datura spp. 1433
 enzyme activity, rose 1395
 ethylene, cabbage 3668
 growth substances
 2,4-D, rose 1394–1395
 orchids 7029
 pea 7738
 inhibition
 celosia 6994
 growth substances, cress 8986
 light
 cabbage 3668
 celosia 6994
 intensity, rose 1394
 storage, tomato 8803
 temperature, tomato 241
 tissue culture, hydrangea 7055
 content
 bean (*Phaseolus*) 8705
 bean (*Vicia*) 8705
 chimeras, privet 8963
 determination, beetroot 5902
 diseased plants
 yellow mosaic, privet 8963
 yellow vein mosaic, okra 6887
 flower
 breeding and selection, rhododendron 7041
 statice 8877
 genetics, carnation 711
 iron nutrition, apple 6563
 leaf
Digitalis spp. 7107
 fluorine toxicity, coleus 8922
 ornamental trees and shrubs 744
 legumes 8705
 plant development, *Sternbergia lutea* 6190
 plant nutrition, tomato 6077
 seed treatment, gamma rays, onion 8738
 seedling, growth substances, lettuce 6789
 degradation
 chilling, cucumber and gherkin 4459
 light, intensity, cucumber and gherkin 4459
 oxygen concentration, cucumber and gherkin 4459
 determination, rhododendron 7041
 genetics, *Kalmia angustifolia* 322
 metabolism
 flower, chrysanthemum 273
 fruit, citrus 4005
 light, radish 2766
 tea, annual report, Malawi 6455
- Pimenta racemosa**, bibliography 7967
- Pimento**, essential oil, composition 7965
- Pimpinella anisum**, bibliography 7967
- P. spp.**
 growing, Czechoslovakia 2368
 root, composition 2368
- Pine leaf-mould**
 media constituent
 azalea 7942
 physical properties 7291
- Pineapple**
 annual report
 Australia 1529, 9121
- Pineapple contd.**
 annual report contd.
 India 4034
 Sarawak 4036
 Sri Lanka 3171
 climate 9194
 drying 22
 economics 9194
 flowering
 date, iron nutrition 9200
 growth substances 1613
 propagation, cuttings, size 1613
 fungicides
 injury
 bordeaux mixture 3249
 Brestan 3249
 growing
 Brazil 9195
 economics 9194
 South Africa, economics 5640
 Venezuela 8119
 harvesting, time of, fruit organic acids 9203
 herbicides
 injury
 diuron 8172
 monuron 8172
 prometon 8172
 persistence
 ametryne 8172
 atrazine 8172
 prometryne 8172
 insecticides, residues, determination, monocrotophos 7302
 intercropping 9198
 packing, plastic, bags, disorder incidence 6419
 planting
 material, size 9197
 spacing 4073
 potassium, content, leaf, iron nutrition 9200
 production and trade 6416
 products and by-products
 bran, animal fodder 4880
 juice, organic acids, content 9203
 various, animal fodder 7220
 report, USA 6382
 research 9194
 review 402
 storage
 controlled atmosphere 6418
 temperature, disorder incidence 6419
 temperature, transpiration 8174
 transpiration, temperature 8174
 transport, containers, refrigerated, design 1614
 weed control 7219, 8172–8173
 review 8121
- Pineapple diseases**
Erwinia carotovora, varietal resistance 5641
Phytophthora citrophthora 3249
P. nicotianae, 3249
Pythium polymorphon 3249
Thielaviopsis paradoxa 9201
T. spp. 3249
- Pineapple disorders**, internal browning 6419
- Pineapple flower**
 initiation
 Ivory Coast 8175
 sunshine 8175
- Pineapple fruit**
 aroma 7171
 quality, iron nutrition 9200
 ripening, iron nutrition 9200
- Pineapple growth substances**
 flowering
 2,4-D 1613
 NAA 1613
- Pineapple leaf**, analysis, methods compared 3302
- Pineapple nutrition**
 iron 9200
 deficiency, symptoms 9200
 nitrogen
 phosphorus nutrition 9199
 potassium nutrition 9199
 phosphorus
 nitrogen nutrition 9199
 potassium nutrition 9199
- Pineapple nutrition contd.**
 potassium
 nitrogen nutrition 9199
 phosphorus nutrition 9199
- Pineapple pests** 1696
Dysmicoccus brevipes 1612
Hanseniella spp. 4074
 nematodes 446, 9202
 Brazil 9126
Pratylenchus brachyurus 9202
Radopholus similis 2394
Rotylenchulus reniformis 2394
Thecla basilides 6417
Tylenchulus semipenetrans 2394
- Pineapple propagation**
 butts 4879
 crown segments 4879
 cuttings, size 1613
 slip, size 9197
 stem segments 4879
- Pineapple stem**
 bromelain 9204
 carbohydrates 9204
- Pineapple varieties** 7218
 disease resistance, *Erwinia carotovora* 5641
 Malaysia 9196
- Pinus radiata**
 as a rootstock, *Pinus* spp. 5461
 varieties, El Dorado 5461
- P. spp.**
 diseases, *Periderium harknessii*, varietal incidence 5461
 propagation, cuttings 5461
- P. sylvestris**, as medicinal plants 5538
- Piper betle**
 diseases
Colletotrichum capsici
 damage 1459
 incidence 1459
Fusarium equiseti 7118
F. moniliforme 7118
F. oxysporum 7118
F. solani 7118
- P. cubeba**, essential oil, composition 7965
- P. methysticum**, root, composition 1452
- Pistachio**
 annual report, Tunisia 4944
 biennial bearing 1039
 flower bud, drop, fruit relationships 994, 3503
 growing, Israel 5058
 pruning and training, container-grown 2275
 ringing, bud, abscission 1039
- Pistachio diseases**, *Nematospora coryli* 6653
- Pistachio flower**
 bud drop
 fruit relationships, biennial bearing 994
 growth substances, PCPA 994
- Pistachio growth substances**
 bud, abscission, PCPA 1039
 flower bud, drop, PCPA 994
- Pistachio rootstocks**, comparative trials, Israel 5058
- Pistachio varieties**
 Israel 5058
 Tunisia 4155
- Pistacia lentiscus**, water, flow 2369
- P. spp.**, as a rootstock, pistachio 5058
- Pitcairnia spp.**, trichome, anatomy, morphology 6199
- Pittosporum**
 annual report, USA 8834
 herbicides, injury, dichlobenil 8851
- Pittosporum soil**, salinity, plant, tolerance 2161
- Plagiognathus politus**, predator on, *Panonychus ulmi*, apple 4213
- Planococcus citri**
 citrus pests 4003
 population studies, cacao pests, annual report, Ghana 7177
- Plant**, analysis, liquid scintillation counting, tissue preparation 4912
- Plant composition**, review, report, German Federal Republic 8284
- Plant nutrition**, nitrogen, report, German Federal Republic 8284
- Plant pathology**
 Hungary, review 3316

Plant pathology *contd.*

India, review 3316

Plant physiology

book 6475

crop yields, symposium 4

Plantago ovata

growth substances

seed

production

2,4-D 9046

IAA 9046

IBA 9046

NAA 9046

seed, production, growth substances 9046

Planting

anti-transpirants

annuals 3333

orange 6355

bed systems, apple, annual report, UK 3371

v direct sown

cabbage, chinese 3663

economics, tomato 3795

melon (cantaloup and musk) 3680

high density

apple 464, 925, 1729, 1737, 2548,

3390, 3401

annual report

Irish Republic 1720

UK 903, 3371

for juice production 1738

cherry 995

citrus, report, Sri Lanka 6323

coffee 7195

economics, apple 463

fruit trees and plants 2558

lemon 3104

light, interception, fruit trees and plants 1710

light intensity, mandarin and tangerine 8064

mechanical, apple 1726

olive 2421, 4025

pear 3489

pome fruits, annual report 450

mechanical

apple 1726

fruit trees and plants 2511

sugar cane 1621

onion 6027

plant, size, apple 3401

root pruning, trees and shrubs 3007

site preparation

forest tree felling

arboricides, disease incidence, rubber

7223

ringing, disease incidence, rubber

7223

spacing

apple 3401

chrysanthemum 6143

disorder incidence, cauliflower and

broccoli 3657

harvesting, mechanical, black currant

3519

lemon 3104

light intensity, mandarin and tangerine

8064

pruning and training, pear 3489

root systems

apple 1740

olive 4025

vegetables 5923

systems

light, interception, fruit trees and plants

1708

pollination, apple 7403

work studies, tulip 1317

Plasmiodiophora brassicae

assessment methods

swede diseases 5165

turnip diseases 5165

brassicac

annual report, UK 1936

diseases 7655

annual report, Australia 5882

brussels sprouts diseases 5194

cabbage diseases 5193

growth substances, endogenous, cabbage

diseases 8623

Plasmiodiophora brassicae *contd.*

resistance

breeding and selection

brassicac 3652

swede diseases 4426

cabbage, annual report, German Federal Republic 7599

soil moisture, cabbage diseases 6797

soil pH, cabbage diseases 6797

spore numbers, cabbage diseases 6797

varietal resistance

brassicac 7640

cabbage diseases 5920

cauliflower and broccoli diseases 5920

Plasmopara* spp.**, spore numbers, grapevine diseases 5858P. viticola***

grapevine diseases, annual report, India

2668

incidence, foliar nutrition, minor elements,

grapevine diseases 7568

resistance, breeding and selection,

grapevine diseases 5825

Plastic

amendments, potting composts,

philodendron 4679

bags

coloured

covering fruit bunches, bird damage

prevention, date 2417

ethylene, production 898

fruit, pigments, tomato 2136

mushroom growing 1310-1311

annual report, Irish Republic 1939,

6770

seedling, raising, coconut 1558

storage

fruit 5747

apple 1791

orange 3150

pear 3498

runners, strawberry 3544

seedlings, cauliflower and broccoli

7638

coatings

fruit storage, apple 984

sett, sugar cane 6430

collar, seedling raising, vegetables, annual

report, Netherlands 8581

containers

horticultural produce, annual report,

Netherlands 5

packing 5682

strawberry 1879

planting, material, storage, strawberry

1879

seedling transport, vegetables 4375

covering plants 5682

bedding plants, annual report, UK

3833

grapevine 1097

holly 7037

pot plants, annual report, UK 3833

propagation, conifers 4688

rain protection, date, annual report,

Tunisia 3981

tomato 3796

vegetables

annual report

Netherlands 1132

UK 3613

films

covering plants

disease incidence, onion 4523

forcing, peach 3480

grapevine 1901

propagation

trees and shrubs 6134

annual report, Irish Republic

2909

spring harvesting, watermelon 3678

strawberry 3546

vegetables 679

frost protection, tree fruits 3358

graft union protection, apple 5714

packing

fruit

apple 5753

mango 4871

for making pots, seedling raising,

vegetables 2865

protection of drying tables, coffee

7197

Plastic *contd.*films *contd.*

storage, fruit, plum 3512

storing, cuttings, grapevine 1087

vegetables, annual report, Yugoslavia

3619

foam, soil amendments, pot plants 8850

greenhouses

Finland 2738

mushroom growing 8833

Sweden 2738

vegetables, annual report, UK 5154

materials

use

growing

leek 2738

strawberry 2738, 7531

horticultural 1879, 5682

symposium 2738

mats, irrigation, chrysanthemum 8859

mulch 5682

cabbage 2758

capsicum 4538, 6889

cucumber and gherkin 4449

annual report, Belgium 8578

disease incidence

tea 5662

tomato 4570

flood protection, annual report, Canada

2734

fruit, pigments, capsicum 6037

lettuce 2753

melon (cantaloup and musk) 3680,

7679

nursery stock 6214

onion 3762

raspberry 3524

red currant 7495

soft fruit, annual report, Yugoslavia

3517

soil

capsicum 6037

moisture 6037

temperature 6037

strawberry 1879, 2738, 4327, 6696,

6699, 7529, 7531

sugar cane, annual report, South Africa

7230

tomato 7779

vegetables 4377-4378

annual report, Austria 114

water conservation, tomato 3799

watermelon 7682

weed control

melon (cantaloup and musk)

7680-7681

rubber 4077

tomato 3798

pots, nursery stock 2493, 6214

string, training, hop 5507

tunnels

cabbage 2758

carnation 5398

clear v. coloured, strawberry 1878

cucumber and gherkin 4449

frost protection

mandarin and tangerine 7130

by sprinkler irrigation, bean

(*Phaseolus*) 2016

grapevine 1099

heat loss, annual report, Irish Republic

6482

late harvesting, strawberry 8521-8522

lettuce 1686, 2753

melon (cantaloup and musk) 7679,

8646

onion 3760

overwintering, strawberry 6700

planting dates, strawberry, annual

report, Irish Republic 1857

propagation

ornamental plants 2166

rose 5475

trees and shrubs, annual report, Irish

Republic 2909

rainfall protection, vegetables 5166

rhubarb 1260-1261

spring harvesting, watermelon 3678

strawberry 1686, 7531

annual report, UK 5096

strength 7293

types compared

annual report, Irish Republic 6482

Plastic contd.tunnels *contd.*types compared *contd.*

fruit, set, capsicum 6889

strawberry 3554

annual report, Belgium 4297

vegetables 1945

variety trials, carrot 8808

vegetables 1261

annual report

German Federal Republic 7600

UK 6774

ventilation, strawberry 7530

water conservation, tomato 3799

weed control, lettuce, annual report,

UK 5885

water-filled mattress, frost protection,

vegetables, annual report, Netherlands

8581

Platinum, toxicity, cucumber and gherkin

157

Platyparea poeciloptera

asparagus pests, annual report, German

Federal Republic 8579

insecticides, application, asparagus pests,

annual report, German Federal

Republic 7598

Plectonema boryanum, alga, irradiation,

gamma rays, injury, reduction, tomato

6097

Pleocyta sacchari, sugar cane diseases,

annual report, USA 9221

Pleospora herbarum

onion diseases, annual report, Netherlands

6772

tomato diseases 242

P. papaveracea, heat treatment, poppy

diseases, annual report, Australia 5385

Plesiocoris rugicollis, black currant pests

5802

Pleurotus ostreatus

edible fungi 2907

growing, Bulgaria 8831

nitrogen, fixing 8830

Pleurotus spp., edible fungi 6124, 6958**Plum**

annual report

Australia 5693

Belgium 6503

Netherlands 23

UK 903, 3347, 8316, 8318

USA 24, 3348

breeding and selection

annual report

Canada 8314

Sweden 6508

USA 451

interspecific hybridization 4244

carbohydrates, content, seasonal variations

7478

classification, Yugoslavia 7468

defoliation

calcium cyanide 6512

chemical 5716, 6510–6511

growth substances 6511

magnesium chlorate 6512

potassium iodide 6512

dormancy

breaking, temperature 907

winter hardiness, water relations 6521

drought 8285

economics

insecticides, application, Italy 4153

UK 6654

enzyme activity

frost resistance 7477

respiration 7477

enzymes 523

frost

injury

bud development 1709

flower bud, development 4290

resistance

enzyme activity 7477

respiration 7477

fungicides

residues

determination

binapacryl 7324

captan 2505

captan 2505

folpet 2505

respiration, leaf 4951

Plum contd.

growing

high altitudes, India 7311

UK, economics 6654

growth studies, seasonal variations 6661

harvesting

fruit, loosening 6662

mechanical

equipment 457

pruning and training 1848

herbicides 3322

injury

simazine 4188

terbacil 3510

residues, determination, 2,4-D 6514

tolerance 3510

high density planting, Switzerland,

statistics 8324

hybrids 3505

insecticides, application, economics 4153

irrigation, requirements 4160

mulching, sawdust 4191

nitrogen, content, fruit, development

6663

phosphorus, content, fruit, development

6663

planting

high density, Switzerland 904

survey, Switzerland 904

pollen

germination 8330

morphology 8330

pollination 1853, 5063

compatibility 3511

pollinating varieties 2659

self- 2659

supplementary 6582

potassium

content

fruit

development 6663

nitrogen nutrition 7473

leaf, nitrogen nutrition 7473

processing

drying

fruit selection 5065

varieties 1846–1847

propagation, cuttings 1807

pruning and training

mechanical, equipment 5703

mechanical harvesting 1848

palmette 1849

time of 4288

respiration

enzyme activity 7477

frost resistance 7477

as a rootstock

damson 1040

peach 3468

storage

annual report, Australia 901

cold 3512

pre-cooling, fruit, ripening 525

temperature

bud, development 1709

dormancy, breaking 907

fruit, set 8477

transport

containers, refrigerated 7426

in water 1718

tree, volume, estimation 8452

water relations

dormancy 6521

premature decline 7467

weed control

annual report, Belgium 2517

nurseries 4188

winter hardiness

dormancy 6521

leaf removal 6521

Plum diseases

chlorotic leaf roll 6608

dark green sunken mottle, incidence, New

Zealand 7474

line pattern 4948

mosaic, incidence, New Zealand 7474

peach seedling chlorosis, incidence, New

Zealand 7474

Phomopsis spp., infection process 7449*Phyllosticta prunicola* 6657

plum pox 4948, 8474

varietal resistance 7469

plum pox virus, symptom expression 91

Plum diseases contd.*Polystigma rubrum*, varietal resistance

6658

prune dwarf 4948

Prunus necrotic ringspot, incidence, New

Zealand 7474

Prunus ringspot, pollen-borne 7475*Sclerotinia fructicola* 8475

post-harvest dips 7481

stem pitting 3474

Stereum purpureum

biological control 8476

Trichoderma viride 6659

varietal resistance 93

Verticillium dahliae, toxins 5062

virus

annual report, German Federal

Republic 6506

control 7320

-tested plants

EMLA scheme 2528

Special Stock Certification Scheme

7320

German Democratic Republic 7321

Xanthomonas pruni, varietal resistance

3507, 5060, 7470

Plum disorders

apoplexy, fungus relationships,

Phytophthora spp. 454

premature decline 7467

Stanley Prune decline 1851

sun scald 522

tree desiccation

soil aeration 7471

soil moisture 7471

Plum flower

bud initiation 4290

nitrogen nutrition 2530

phosphorus nutrition 2530

rootstocks 2530

soil management 2530

time 6661

morphology, growth correlations 4164

Plum fruit

amino acids, content 6834, 8667

composition 1846, 2661

potassium nutrition 7473

rootstocks 5798

development, composition 6663

loosening

growth substances 6662

ethephon 5801

quality 2661

ripening, storage, pre-cooling 525

set, temperature 8477

size

nitrogen nutrition 7473

rootstocks 5798

sugars, content 6834, 8667, 8667

thinning

annual report, UK 3371

growth substances 7479

mechanical, shaker 524

wax, composition 5064

Plum growth substances

cuttings, treatment, IBA 5061

endogenous, seed 2523

fruit

loosening, ethephon 5801, 6662

thinning, 2,4,5-T 7479

injury, ethephon 7314

leaf, removal, ethephon 6511, 7314

responses

aminozide 3360

chlormequat, review 8310

Plum leaf

analysis, sampling, position 6552

cell sap, concentration, seasonal variations

916

nitrogen, content 6552

phosphorus, content 6552

potassium, content 6552

removal, chemical 6510–6511, 7314

Plum nutrition

general, leaf analysis, symposium 2489

nitrogen

fruit, size 7473

potassium content 7473

potassium nutrition 7473

NPK, leaf analysis, sampling 6552

potassium

fruit, composition 7473

nitrogen nutrition 7473

Plum × peach, hybrids 4244

Plum pests

- Aculops berochensis* 2658
- Aculus fokeui* 2658
- Conotrachelus nenuphar* 4289
- Diptacus gigantorhynchus* 2658
- Grapholitha funebrana* 6660
 - biological control 6660
- Hemicriconemoides chitwoodi* 5132
- mites, biological control 29
- Panonychus ulmi* 81
- Phyllocoptes abaeus* 2658
- Quadraspidiotus perniciosus*, control 7476
- Scolytus mediterraneus*, host preference 94

Plum propagation 26

- budding, nutrition 931
- cuttings
 - root, treatment, growth substances, IBA 8323
 - treatment
 - growth substances 5061
 - IBA 1850
- nursery stock, defoliation 5716

Plum root

- growth
 - soil moisture 6656
 - soil temperature 6656

Plum rootstocks

- calcium, absorption 2657
- comparative trials
 - Australia 5798
 - Rumania 7341
- flower bud, initiation 2530
- Marianna 2657
- Myrobalan 2657
- peach seedling 2657
- propagation
 - cuttings, treatment, growth substances 3508-3509
 - stooling 3508
 - scion relationships 1040
 - leaf, nutrients, content 2657
 - St. Julien A 2657
 - propagation 3509
 - virus-tested plants, EMLA scheme 7320

Plum seed

- germination, metabolic processes 2523
- treatment, stratification, metabolic processes 2523

Plum soil

- aeration, tree desiccation 7471
- moisture
 - root growth 6656
 - tree desiccation 7471
- temperature, root growth 6656

Plum varieties

- annual report, USA 1706, 3349
- Bleue de Belgique 6530
- Blue Rock 6530
- Byala Razgradska 2655
- comparative studies, South Africa 8322
- comparative trials 3504
 - annual report, Netherlands 5697
 - Bulgaria 2655
 - Yugoslavia 2660, 3506
- Desertna 7469
- disease incidence, plum pox 8474
- disease resistance
 - Polystigma rubrum* 6658
 - Xanthomonas pruni* 3507
- drought resistance 4287
- flowering, date 5063
- fruit
 - cracking 4286
 - quality 2661
- Gabrovska 6655
 - pollinating varieties 6655
- growth studies 7472
- Harry Pickstone 5060
- heat resistance 4287
- identification, shoots, nursery 3354
- Italy 1846-1847
- Julka 2656
- Kyustendilska 2655
- Monforska 2655
- pollen compatibility 2659, 3511
- Požegača 3505-3506
- processing, drying 1846-1847
- register, USA 4156
- Rhodesia 5764
- Sanctus Hubertus 6530

Plum varieties contd.

- Seneca 5796
- Songold 3507, 7470
- Stanley 4286
- USA, winter hardiness 3358
- USSR 2521
- virus-tested clones, EMLA scheme 2528, 7320

Plumbago spp.

- flower development 323
- quinones 3003
- P. spp.*, seed, development 323
- Plumeria spp.*, value 7962
- Plutella maculipennis*
 - cabbage pests 7658
 - annual report, USA 4367
 - control, cabbage pests 6798, 8626

P. xylostella

- annual report, Sarawak, vegetables, pests 3609
- biological control, cabbage pests 4427
- cabbage pests 5195
- parasites, crucifers, pests 4430

Poa annua

- lawns and sports turf, Finland 7020
- as weeds
 - annual report, USA 1315
 - gladiolus 6175
 - lawns and sports turf, taxonomic studies 7916
 - strawberry 8510

P. pratensis

- diseases, *Helminthosporium sativum*, host enzyme activity 740
- lawns and sports turf
 - breeding and selection, disease resistance 6195
 - car parks 7919
 - Finland 7020
 - mowing
 - height 7924
 - population studies 8916
 - nitrogen nutrition, population studies 8916
 - weed control 5443
 - seed, production 8896

P. spp.

- breeding and selection, lawn grasses 1370
- chromosome, numbers 1370
- grasses, lawns and sports turf, weed control 738
- lawns and sports turf
 - breeding and selection 3884
 - cold, resistance 304
 - irrigation, requirements 8915
 - tree root competition 303
 - UK 7917
 - variety trials 7021
 - weed control 8913
 - weed incidence 8915
 - Yugoslavia 7915
- orchard tracks 3890
- root, development, turf 302
- as weeds, lawns and sports turf 5446, 7922, 8913

Podocarpus spp.

- growth substances, responses, GA, annual report, USA 6129
- propagation, cuttings, shoot, age 2982

Podosphaera leucotricha

- apple diseases 45, 473, 1747, 3408, 4210-4211, 5731-5732, 7386
- annual report
 - German Federal Republic 4943, 6506
 - Netherlands 5697-5698
 - UK 903, 3371, 8318
 - USA 24
- chemical pruning, apple diseases 2576
- control
 - apple diseases 6560, 7323, 7384-7385, 7387-7388, 8391, 8482
 - annual report, German Federal Republic 7309
 - damage, apple diseases 953
 - incidence, apple diseases 7383
 - resistance, apple diseases 2539
 - rootstock resistance, apple diseases 8345
 - varietal resistance, apple diseases 953, 3377, 7336, 8380

P. spp.

- control 8305

Podosphaera spp. contd.

- control contd.
 - cherry diseases, annual report, USA 8319

Pogostemon cablin

- essential oil
 - composition, determination 8990
 - nutrition, annual report, Sarawak 3933
 - terpenes, biosynthesis 3036
 - terpenes 3036

P. spp.

- pests, *Meloidogyne incognita* 336
- tissue culture
 - cell suspension
 - growth studies 7083
 - nutrient absorption 7083

Poinsettia

- annual report
 - Austria 265
 - Irish Republic 2909
 - UK 4606
 - USA 1441, 6129, 8834
- dwarfing
 - growth substances 2984, 4695
 - chlormequat 4696
- flowering
 - date 4699
 - light
 - artificial 8841
 - supplementary 8841
 - photoperiodism 3914
 - pinching 3914
- growing
 - in greenhouses
 - glass 8841
 - plastic 8841
 - media, coal ash 8857
 - peat 6219
- growth, apical dominance, growth substances 4697
- insecticides, injury, chlorfenvinphos 8945
- light
 - artificial
 - equipment 8841
 - flowering 8841

ozone

- injury
 - leaf 3916
 - prevention, growth substances 8946

photoperiodism

- flowering 3914
- pinching 3914, 4698
- physiology, annual report, USA 3835
- pinching
 - chemical 6218
 - flowering date 4699
 - photoperiodism 3914, 4698

pruning and training 2984

- chemical
 - growth substances 6218
 - pinching 6218
- report, USA 6130
- sulphur dioxide, injury, prevention, growth substances 8946
- temperature 2984

Poinsettia diseases

- Botrytis cinerea*, varietal resistance 3916
- Erwinia carotovora* 3915
- Pythium ultimum* 2283
- Rhizoctonia solani* 2283

Poinsettia flower

- bract, size, growth substances 6219
- injury, insecticides 8945

Poinsettia growth substances

- branching
 - BA 2284
 - ethephon 2284
 - kinetin 4697
 - PBA 2284
 - TIBA 2284
- dwarfing
 - aminozide 4695
 - Ancymidol 1390
 - chlormequat 1389, 2984, 4695-4696
 - Pericetac 4695
- injury
 - ancymidol 8946
 - chlorosis, chlormequat 1389
- ozone injury
 - prevention
 - ancymidol 8946
 - chlormequat 8946

Poinsettia growth substances *contd.*

- pinching
 - BA 6218
 - ethephon 6218
 - PBA 6218
 - TIBA 6218
- responses, chlormequat 8842
- retardants, chlormequat 6219
- retardation
 - ancymidol 8946
 - chlormequat 8946
- sulphur dioxide injury
 - prevention
 - ancymidol 8946
 - chlormequat 8946

Poinsettia leaf

- colour, calcium nutrition 6219
- injury, insecticides 8945

Poinsettia nutrition 1325

- calcium
 - leaf, colour 6219
 - toxicity 282
- fertilizers
 - liquid 2984
 - slow-release 2282, 2984
- interaction, growth substances 1389
- Poinsettia propagation**
 - cuttings
 - source plants, treatment, growth substances 2284
 - temperature 8867
 - time 4699
 - treatment
 - growth substances 2281
 - SADH 713

Poinsettia varieties

- comparative trials, USA 2280
- disease resistance, *Botrytis cinerea* 3916

Pollen

- collection, fluid-bed dryer, coconut 9160
- germination
 - boron nutrition, trees and shrubs 3000
 - calcium nutrition
 - fluorine toxicity
 - cucumber and gherkin 6932
 - tomato 6932
 - enzyme activity
 - eschscholtzia 2213
 - Haemanthus albidiflos* 8910
 - fluorine toxicity
 - calcium nutrition
 - cucumber and gherkin 6932
 - tomato 6932
 - humidity, lily 7010
 - lily, annual report, USA 8839
 - media
 - Eugenia cuminii* 2482
 - pear 5790
 - nucleic acids
 - apple 2651
 - pear 2651
 - radish 7671
 - RNA, synthesis, petunia 275
 - temperature
 - apple 7404
 - pear 5790
 - tree fruits 8330
- morphology
 - Luffa* spp. 7694
 - radish 7670
 - tree fruits 8330
- ozone, injury, petunia 1340
- physiology
 - Luffa* spp. 7694
 - radish 7670
- processing, apple, annual report, UK 903
- production
 - coconut 5615
 - temperature, hazel 3454
- protoplasts, isolation, petunia 2202
- size, brassicas 2763
- sterility, peach 7454
- storage
 - oil palm, annual report, Nigeria 9181
 - Salvia* spp. 1411
- studies
 - lily 5432
 - pomegranate 8116
 - rubber 8186
 - statice 6988
- tissue culture
 - lily 1363

Pollen *contd.*

- tissue culture *contd.*
 - ornamentals 707
 - petunia 6153
 - tomato 6929
- viability
 - brassicas 2763
 - raspberry 5088
 - salsify 140
 - scions treatment, gamma rays, apple 3415
- seed
 - treatment
 - okra, annual report, India 3607
 - tomato 245
 - sugar cane, annual report, USA 9221
 - varietal differences, narcissus 8899
- Pollen tube**
 - growth
 - apple, annual report, UK 903
 - coffee, annual report, UK 2449
 - ornamentals 707
 - petunia 6155
 - nuclei, petunia 6155
- Pollination**
 - amino acid, biosynthesis, *Oenothera* spp. 6998
 - artificial
 - apple 7405
 - annual report, UK 903
 - capsicum 2840
 - grapevine 5142
 - melon (cantaloup and musk) 4462
 - methods compared, tomato 5363-5364
 - pear 6647
 - seed production
 - cacao 3180
 - coconut 5615
 - lily 2952
 - bees
 - blueberry 536, 1066
 - annual report, Canada 6668
 - cucurbits 3692
 - nesting sites, blueberry 6689
 - Osmia cornifrons*, apple 1780
 - seed production, vegetables 5899
 - compatibility
 - genetics, chrysanthemum 8858
 - plum 3511
 - cross- and self- compared
 - fruit set
 - apple 2593
 - black currant 4312
 - pear 6647
 - raspberry 5088
 - grapevine 5142
 - primula 6156
 - double fertilization, *Tulipa* spp. 2960
 - electrical potential
 - brussels sprouts 1175
 - cabbage 1175
 - ethylene, production, *Cymbidium* spp. 6209
 - flower
 - biology, watermelon 4461
 - colour, *Oncidium* spp. 4681
 - flowering, date, plum 5063
 - Forcipomyia* spp., cacao 2445
 - fruit
 - development, mulberry 7439
 - parthenocarp, pear 6649
 - set, pear 6649
 - insects
 - apple, annual report, UK 903
 - black currant 7501
 - horticultural crops, review 7282
 - mechanical
 - methods compared
 - date 1515
 - tomato 1301
 - mechanism
 - brussels sprouts 152
 - kale 152
 - nucleic acids, biosynthesis, cucumber and gherkin 3693
 - pear, annual report, Australia 450
 - pigments, biosynthesis, *Cymbidium* spp. 6209
 - pollen mixtures, melon (cantaloup and musk) 6833
 - pollinating varieties
 - apple 8408
 - orange 8090

Pollination *contd.*

- pollinating varieties *contd.*
 - pear 5789
 - review, walnut 25
 - time from flowering, fruit, set, capsicum 6045
 - windbreaks, apple 4222
- Pollution**, metal toxicity, industrial sources 3299
- Polyalthia longifolia**
 - essential oil
 - fungicidal properties 6256
 - medicinal properties 3016
- Polyembryony**
 - cacao 4842
 - citrus 9079
 - induction, tissue culture, *Ammi* spp. 1447
- Polygonum convolvulus**, as weeds, vegetables, herbs 6777
- P. coriarium**
 - glycosides 6309
 - phenolic compounds 6308-6309
- P. spp.**
 - as weeds
 - bean (*Phaseolus*) 8683
 - tea 9272
 - tomato 6069
- Polyploid**, induction, tissue culture, sugar cane 403
- Polyploids**
 - cucumber and gherkin 8643
 - haploid induction from, strawberry 8501
 - induction, sapodilla 9218
- Polystichum** spp.
 - diseases, *Ascochyta necans* 1377
 - light, intensity, frond, weight 8931
 - nutrition, NPK 8931
 - soil, amendments, peat 8931
- Polystigma rubrum**
 - varietal resistance
 - apricot diseases 7420
 - plum diseases 6658
- Pome fruits**
 - diseases, latent viruses 4948
 - economics, Netherlands 4150
 - frost
 - injury
 - critical temperatures 4159
 - flower, development 4158
 - grading, work studies 917
 - growing, Argentina 1707
 - harvesting, mechanical, equipment 8411
 - storage, buildings, controlled atmosphere 483
 - thinning 456
 - chemical 456
 - yield, estimation, methods compared 979
- Pomegranate**
 - dye plants 3943
 - fungicides
 - application
 - packing straw
 - ammonium compounds 9118
 - diphenylamine 9118
 - sulphur compounds 9118
 - medicinal properties 4753
 - packing, straw, fungicides 9118
 - pollen, studies 8116
- Pomegranate diseases**
 - Discosia punicae* 1526
 - Rhizopus arrhizus*, packing straw treatment 9118
- Pomegranate fruit**, cracking 4030
- Pomegranate pests**, mites, biological control 29
- Pomegranate propagation**
 - cuttings
 - root, treatment, growth substances, IBA 8323
 - treatment, growth substances, IBA 8323
- Pomegranate varieties**
 - comparative trials, Yugoslavia 4030
 - fruit, cracking 4030
- Pometia pinnata**, fruit, description 9282
- Poncirus trifoliata**
 - breeding and selection 7125
 - carbohydrates
 - content
 - fruit 9108
 - leaf 9108
 - hybrids, interspecific 5545

***Poncirus trifoliata* contd.**

- nutrition, iron 1480
- pests, *Tylenchulus semipenetrans*, resistance 3100
- as a pollinator, orange 8090
- root, composition, coumarin 5570
- as a rootstock
 - citrus 3101, 7125
 - disease resistance, grapefruit 9092
 - lemon, annual report, Australia 4782
 - mandarin and tangerine 4788, 8062
 - orange 795, 5547

seed

- treatment
 - growth substances, GA 1468
 - stratification 1468

Pongamia glabra*, flavonoids 6245*Poppy**

- alkaloids 9044
- content 2367
 - nitrogen nutrition 7112
 - phosphorus nutrition 7112
- determination 5528, 9043
- metabolism 6307
- production, annual report, Irish Republic 8035

- growing, for opium production, book 2337

- species, hybrids 6306
- weed control 3062

Poppy diseases, *Pleospora papaveracea*, heat treatment, annual report, Australia 5385**Poppy nutrition**

- nitrogen 7112
 - alkaloids, content 7112
- phosphorus 7112
 - alkaloids, content 7112

Poppy propagation, cuttings, root 4613**Poppy varieties, alkaloids, content 2366*****Populus* spp.**

- propagation
 - cuttings 3009
 - treatment, growth substances, IBA 3009

Poria carnegiea*, *Carnegiea gigantea*, diseases 6202**P. hypolateritia*, tea diseases, annual report, Sri Lanka 8262****Portuguese East Africa**

- banana, growing 8125
- coconut, growing 7186

Portulaca grandiflora

- ground cover plants, growth retardants 6157
- pests, nematodes, Brazil 9126
- propagation, cuttings, treatment, growth substances 7886

P. spp.

- as weeds
 - artichoke, globe 3633
 - herbs 6777
 - onion 5305
 - vegetables 680, 6777

Pot plants

- air pollution, sulphur dioxide, ethylene, injury 6132
- compost, amendments, plastic foam 8850
- economics 4608
 - Denmark 2156
 - Netherlands 2156
- fungicides, injury, benomyl 5393
- growing
 - Denmark 2156
 - Finland 8843
 - in greenhouses, transport, conveyor belt 6965
 - Netherlands 2156
- peat
 - nutrition 5393
 - review 5389
- under plastic, annual report, UK 3833
- sand beds, alga control 8847
- growth substances
 - pinching
 - chlormequat 5393
 - review 6135
 - responses, review 6135
- irrigation
 - automatic 2914, 4135
 - capillary, fertilizer application 6495
 - fertilizers, application 1687
 - Kölle system 8849

Pot plants contd.**irrigation contd.**

- methods 1687, 2169, 2914
- requirements, determination 2914
- nutrition 5389
- potting, mechanical, disease incidence 5393
- raising, Quick-pot pallets, *Erica* spp. 2277
- seed, germination, temperature 8843
- temperature, seedling production 8843
- transport 2278

Potassium**absorption**

- aluminium nutrition
 - apple 5730
 - tea 6458
- fruit, set, mandarin and tangerine 3111
- growth substances
 - bean (*Vicia*) nutrition 4494
 - tomato 6094
- leaf
 - light, tissue culture, bean (*Vicia*) nutrition 4494
 - tissue culture, bean (*Phaseolus*) 8697

- nitrogen nutrition
 - apple, peach 466
 - tomato 6910
- orange 6342-6343, 7135
- peat pH, chrysanthemum 6145
- phosphorus nutrition, beetroot 2745

application

- foliar
 - almond 8333
 - tomato 3801
- methods compared, cucumber and gherkin 5950
- ascorbic acid, content, lemon 3113
- calcium, content, *Agrostis* spp., 3893
- cell wall, composition, pea 8730
- chlorophyll, content, leaf, apple 5723
- cold, resistance, lawns and sports turf 3895

content

- aluminium nutrition, bean (*Phaseolus*) 5974
- biennial bearing, apple 971
- copper nutrition, coffee 393
- flower, peach 6631
- fruit
 - development, plum 6663
 - disorders, pear 3493
 - nitrogen nutrition
 - plum 7473
 - strawberry 8513
 - peach 6631
 - phosphorus nutrition, orange 3157
 - tomato grafted on potato 8795-8796
- iron nutrition, cherry 496

leaf

- apple 6553
- banana 5603
- copper nutrition, orange 9087
- drought, sugar cane 2474, 8200
- flooding, sugar cane 2474, 8200
- fruit, disorders, apple, annual report, Netherlands 4956
- iron nutrition
 - orange 9087
 - pineapple 9200
- manganese nutrition, orange 9087
- mulching, apple 938
- nitrogen nutrition
 - orange 9087
 - plum 7473
 - sources, peach 3470
 - tomato 6910
- rootstocks, plum 2657
- seasonal variations
 - apple 6554
 - peach 508, 6630
- soil management, peach 1017
- soiless culture, grapevine 6749
- varietal differences, apple 6554
- zinc nutrition, orange 9087

- nectar, pollination, bees, onion 2088

nitrogen nutrition

- orange 1478
- tea 6457

plant

- aluminium nutrition, tea 6458

Potassium contd.**content contd.****plant contd.**

- diseases, tomato 7798
- fruiting, fruit trees and plants 5705
- herbicides, simazine, strawberry 545
- seasonal variations, peach 508
- vegetables 8702

root

- nitrogen nutrition, tea 8270
- soil salinity, pea 8722

shoot

- root temperature, chrysanthemum 8863
- seasonal variations, apple 6554
- varietal differences, apple 6554
- tuber, tomato grafted on potato 8795-8796

deficiency

- apple nutrition 4979
- banana nutrition 6385
- coffee 9166
- diagnosis, tea 3277
- grapefruit nutrition 798
- grapevine 864
- leaf analysis, tea, annual report, Sri Lanka 8262
- magnesium, content, leaf, mandarin and tangerine 3117
- manganese nutrition, banana, annual report, Australia 5600
- symptoms
 - coffee 3197-3198
 - correction, growth substances, bean (*Phaseolus*) 2799
 - ginger 5492
 - mandarin and tangerine 7136
 - tomato 4567

determination

- atomic absorption spectrophotometry 8290
- methods 8289

disease development

- Fusarium solani*, bean (*Vicia*) 4489
- Phomopsis theae*, tea 5662
- Rhizoctonia solani*, bean (*Vicia*) 4489

disease incidence

- Botrytis cinerea*, tomato 5345
- tomato 3801

essential oil

- composition, mint 6263
- content, mint 6263

flower

- colour, rose 2294
- cut, life, chrysanthemum nutrition 718
- number
 - rose 7946
 - rose nutrition 748

quality

- chrysanthemum nutrition 718
- rose nutrition 748
- sex, melon (cantaloup and musk) 165
- size, celosia 6133
- stem length, rose 7946

flower bud, fruiting potential, grapevine 3578**flowering, date, chrysanthemum nutrition 718****fruit**

- amino acids, content, capsicum 1269, 6039
- capsaicin, content, capsicum 8752
- colour, tomato 3801
- composition
 - ascorbic acid, melon(cantaloup and musk) 165
 - orange nutrition 1478
 - papaw 842
 - plum 7473
 - strawberry 7535
 - tomato 3801
- disorders, tomato 3820
- flavour, tomato 6937
- metabolism, fruit trees and plants 5705
- nitrogen, content, capsicum 8753
- proteins, content, capsicum 8753
- quality
 - melon (cantaloup and musk) 165
 - orange 805
- set, melon(cantaloup and musk) 165

Potassium contd.

- fruit contd.
 - size
 - grapefruit nutrition 798
 - orange nutrition 1478
 - peach 508
 - tomato 3801
 - storage life, composition, apple 6557
 - interaction, growth substances, lettuce nutrition 8607
- leaf
 - amino acids, content, capsicum 1269, 6039
 - colour, coleus 6133
 - composition
 - grapefruit 2384
 - lemon 2384
 - orange 2384
 - disorders, capsicum 8752
 - nitrogen, content, capsicum 8753
 - proteins, content, capsicum 8753
- leaf analysis
 - apple 3402, 8375
 - banana 9131
 - chrysanthemum 7856
 - citrus 1484
 - coffee 1570
 - mango 5631
 - orange nutrition 1478
 - peach 1018, 3471–3472
 - petiole analysis compared, grapevine 8551
 - rubber 1616
 - seasonal variations, annual report, India 1657
 - soil management methods compared,
 - apple 8358
 - sugar cane 412
 - tea 1662
 - magnesium, content, *Agrostis* spp., 3893
 - manganese, content, *Agrostis* spp., 3893
 - metabolism
 - colloquium 8308
 - tissue culture, bean (*Phaseolus*) 7711
 - nematicide injury, reduction, peach 4258
 - nitrogen, content, *Agrostis* spp., 3893
 - nitrogen imbalance
 - coffee 9167
 - stem length, rose 2294
 - nitrogen nutrition
 - pineapple 9199
 - plum 7473
 - pest incidence, pea nutrition 1232
 - petiole analysis, leaf analysis compared, grapevine 8551
 - phosphorus absorption, beetroot 2745
 - phosphorus nutrition
 - mandarin and tangerine 9083
 - pineapple 9199
 - photosynthesis, cucumber and gherkin 5958
 - physiological responses, colloquium 8308
 - placement, methods compared, root growth, apple 8377
 - plant, composition, pea 5243
 - plant analysis
 - banana 9131
 - mandarin and tangerine 7136
 - sugar cane 6437
 - proteins, biosynthesis, pea 6005
 - requirements
 - light intensity, tomato 6908
 - vegetables 4381
 - residues from straw burning, iris nutrition 2243
 - root analysis, peach 3471
 - seed, treatment, lettuce 137
 - sodium, content, *Agrostis* spp., 3893
 - sodium nutrition, tea, annual report, Sri Lanka 8262
 - soil analysis
 - rubber 1616
 - soil management methods compared,
 - apple 8358
 - soil pH, cacao 7180
 - sources
 - chloride, leaf chlorine content, coffee 3199
 - compared, *Agrostis* spp., 3893
 - frost resistance, apple 4974
 - grapefruit nutrition 798
 - sulphur-coated, watermelon 3683

Potassium contd.

- translocation
 - bean (*Phaseolus*) 2028
 - enzyme activity, root, pumpkin 2778
 - marrow, annual report, UK 5943
 - temperature, bean (*Phaseolus*) 2028
 - yield reduction, peach 8456
- Potato
 - as a rootstock
 - tomato
 - fruit, nutrients content 8795–8796
 - tuber, nutrients content 8795–8796
- Potentilla spp.**
 - genetics, sex determination 6242
 - propagation, cuttings 752
 - as weeds, grapevine 5840
- Poterium polygamum**, essential oil, content 7983
- Pots
 - Jiffy-Belts, pot plants, endive 5390
 - paper 2494
 - pot plants, endive 5390
 - plastic
 - nursery stock 2493
 - pot plants, endive 5390
 - made from plastic films, seedling raising, vegetables 2865
 - types compared, pot plants, endive 5390
- Potting
 - mechanical
 - equipment 7292
 - labour requirements 7292
- Potting composts
 - amendments, *Vriesia* spp. 7931
 - bark, trees and shrubs 2276
 - Hygromull, azalea 7942
 - pine leaf-mould, azalea 7942
 - types compared
 - gloxinia 2946
 - nutrient availability, ornamental plants 6963
 - plant nutrition, gloxinia 8893
 - Vriesia* spp. 8919
- Prangos pabularia**, coumarins 6310
- Pratylenchoides laticauda**, hop pests, annual report, German Federal Republic 7064
- Pratylenchus brachyurus**
 - coffee pests 1581
 - onion pests 3764
 - pineapple pests 9202
 - rubber pests 9215
- P. coffeae**
 - cardamoms pests 8153
 - coffee pests 8153
 - lemon pests 3133
- P. loosi**
 - tea pests 3317
 - annual report, Sri Lanka 8262
- P. penetrans**
 - apple pests 6570
 - begonia pests, annual report, Belgium 8835
 - control, lily pests 7902
 - disease relationship, tomato pests 243
 - hop pests, annual report, German Federal Republic 7064
 - nematicides, application, methods compared, rose pests 7948
 - pea pests 1231
 - root rot relationship 211
 - population studies
 - cover crops, peach pests 7452
 - herbicides, peach pests 7452
 - population suppression, by compositae 283
 - resistance, ornamental plants, pests 4615
 - rootstock resistance, rose pests 1393
- P. spp.**
 - bean (*Phaseolus*) pests 645
 - bulbs, pests 3864
 - heat treatment, banana pests 5605
 - rhizome dips, banana pests 5605
 - sugar cane pests 7246
- P. vulnus**
 - rose pests 1392
 - annual report, Netherlands 6127
 - soil fumigation, peach pests 1021, 3475
- Prays citri**, biological control, citrus pests, annual report, Cyprus 3980
- Primula**
 - annual report, Austria 265
 - breeding and selection 6156
 - genetics, polyploids 6156

Primula contd.

- pollination, polyploids 6156
- Primula diseases**, mycoplasma, control, antibiotics 5410
- Primula growth substances**, retardants, Pydanon 2163
- Primula nutrition**, minor elements, annual report, Netherlands 6962
- Primula seed**, production, pollination 6156
- Primula spp.**
 - diseases
 - green petal 4634
 - vectors, leafhoppers 4634
 - disorders, chlorosis, annual report, Netherlands 6127
 - seed, germination, temperature 2203
- Prinsepia spp.**, propagation, seed, annual report, Canada 2910
- Privet
 - chimeras, pigments, content 8963
 - pigments
 - content
 - chimeras 8963
 - diseased plants, yellow mosaic 8963
 - pruning and training, chemical 7958
 - replanting, soil, sterilization, annual report, German Federal Republic 7844
- Privet diseases**, yellow mosaic, host pigments, content 8963
- Privet growth substances**
 - injury, 1-propylphosphonic acid 7958
- retardants
 - 3-carboxy-2-pyridones 3334
 - ethyl hydrogen 1-propylphosphonate 7958
 - MH 7958
 - 1-propylphosphonic acid 7958
- Privet propagation**, cuttings, media 3838
- Proceedings**
 - Annual Grower's Short Course, Lower Mainland Horticultural Improvement Association, Canada 8500
 - colloquium
 - International Potash Institute 8308
 - plant analysis and fertilizer problems 6479
 - conference
 - Conifers in the British Isles 7035
 - International Organization of Citrus Virologists 5557
 - International Shade Tree 6211
 - Plant Growth Substances 7283
 - congress, International Potash Institute 864
 - International Colloquium of the Chemistry of Coffee 9172
 - Refresher Course for Nurserymen, Pershore 4612
 - scientific colloquium, International Council for the Study of Viruses and Virus Diseases of the grapevine 5853
 - symposium
 - cherries 4232
 - french beans 8671
 - Horticultural problems of the Northern Caucasus 5700–5701
 - International *Verticillium* 3325
 - isotopes and radiation in soil-plant relationships 6484
 - leaf analysis 2489
 - macadamia and pecan 7164
 - mango and mango culture 3210
 - pecan specialists 5794
 - physiological aspects of crop yield 4
 - physiological processes in controlled environments 3296
 - phytotoxins 4928
 - plastics in horticulture 2738
 - selection of plant propagating material 2916
 - strawberry growing under protected cultivation 6698
 - vegetable growing in COMECON countries 5881
- Prodecatoma cooki**, grapevine pests 3588
- Proforpomyia spp.**, pollinator, cacao 5612
- Prometheca cumingi**
 - parasites
 - Achrysocaris promethecae*, coconut pests 8143
 - Dimmockia javanica*, coconut pests 8143

Promecotheca contd.**P. papuana**

- biological control, coconut pests 9158
- coconut pests 2444

Pronematus spp., predator on, *Eutetranychus orientalis*, citrus 1488-1489**Propagation**, materials, selection, symposium 2916**Prosopis alba**, alkaloids, extraction from leaves 777**Protea spp.**

- growth substances, endogenous, seed 750
- propagation, embryo, tissue culture, growth substances, treatment 6243
- seed, growth substances, content 750
- tissue culture, embryo, growth substances, treatment 6243
- water relations 8967

Proteins

- antagonism growth substances, pea 6016
- bean (*Phaseolus*) 4484
- bean (*Vicia*) 4484
- bean (*Vicia*) 4493
- biosynthesis
 - almond 5773
 - coloured light, bean (*Vicia*) 8712
- enzyme activity
 - bean (*Phaseolus*) 196, 4479
 - pumpkin 161
- fruit 5690
 - abscission, ethylene 448
 - grapevine 7587
- growth substances
 - ethephon, fig 1008
 - lettuce 137
- herbicides, bean (*Phaseolus*) 6855
- inhibition, growth substances, chloramphenicol, grapevine 1927
- leaf, grapevine 7587
- nitrogen nutrition, tomato 249
- pea 7740
- peach 5773
- photoperiodism, coloured light, *Salvia sclarea* 7085
- seed
 - development
 - bean (*Vicia*) 2046
 - mustard 4736
- temperature, apple 50

content

- bud, growth substances, orange 8089
- chloroplast, zinc, tomato 4564
- cold resistance, *Albizia* spp. 1398
- compost type, mushroom 700
- cotyledons, herbicides, bean (*Phaseolus*) 2012
- disease resistance, *Erysiphe communis*, pea 7730
- diseased plants, melon (cantaloup and musk) 7685
- frost, resistance, grapevine 1927
- fruit
 - berry fruits 101
 - grapevine 7595
 - Guilielma gasipaes* 7272
 - phosphorus nutrition, capsicum 8753
 - potassium nutrition, capsicum 8753
 - seasonal variations, persimmon 2432
- growth substances, chlormequat, bean (*Phaseolus*) 5258
- herbicides
 - bean (*Phaseolus*) 2012, 4485, 5995
 - pea 206, 4485
 - spinach 4485
- iron, tissue culture, carrot 1307
- irrigation, bean (*Phaseolus*) 5258
- leaf
 - fruiting, olive 8112
 - growth substances, orange 8089
 - herbicides, pea 2070
 - phosphorus nutrition, capsicum 8753
 - potassium nutrition, capsicum 8753
 - seasonal variations, olive 8112
 - soiless culture, grapevine 6749
- molybdenum nutrition, pea 209
- nitrogen nutrition, bean (*Phaseolus*) 3701, 5242
- ozone injury, bean (*Phaseolus*) 2015
- phosphorus nutrition, bean (*Phaseolus*) 3701

Proteins contd.**content contd.****plant**

- development, carrot 2894
- report, German Federal Republic 8284

plant nutrition, cabbage 143**potassium nutrition**, bean (*Phaseolus*) 3701**review** 4941**root**

- apple 1727
- storage quality, celeriac 2902

seed

- bean (*Phaseolus*) 197
- mutants, pea 8732
- varietal differences, bean (*Phaseolus*) 1205

seed germination, radish 8641**seed treatment**, bean (*Phaseolus*) 5242**seedling**, growth substances, lettuce 6789**sulphur dioxide**, pea 6015**varietal differences****lemon** 3131**onion** 231**vitamin treatment**, pea 6014**water deficiency**, apple 4962**water relations**, vegetables 3628**determination****bean** (*Phaseolus*) 4486**chloroplast**, antirrhinum 5411**electrophoresis**, vegetables 4384**fruit**, banana 8129**grapevine** 4360**paper chromatography**, tomato 8807**distribution**, phloem cells, squash 7688**extraction**, seed, almond 3368**flower bud**, initiation, mustard 3010**metabolism****bean** (*Phaseolus*) 3722**colchicine treatment**, carrot 4591**fruit****maturation**, citron 8094**ripening** 7306**growth substances****cucumber and gherkin** 151**kale** 151**leaf**, senescence, apple 7400**seed germination**, bean (*Phaseolus*) 5239**trace elements**, spinach 2747**structure**, seed, squash 8642**Protohydnum gelatinosum**, edible fungi 2906**Protomyces macrosporus****coriander diseases** 2319**resistance**, coriander diseases 2319**Pruning and training****biennial****apple** 3397**annual report**, UK 3372**biennial bearing****apple** 4223**mandarin and tangerine** 1477**bud**, break, grapevine 568**cell sap concentration**, grapevine 5110**chemical****apple**, annual report, Canada 2515**azalea** 7045**blueberry** 8493**disease control**, *Podosphaera leucotricha*, apple 2576**equipment**, azalea 2286**grapevine** 1125**growth substances****aminozide**, apple 1778, 3396, 5719**annual report**, UK 8317**apple** 6576**azalea** 7044**NAA**, apple 2588**Off-Shoot-O**, azalea 2286**poinsettia** 6218**TIBA**, apple 2588**pinching****azalea** 7043**poinsettia** 6218**privet** 7958**climate**, microclimate, grapevine 1096**container-grown**, trees and shrubs 2275**disease control**, *Pseudomonas savastanoi*, olive 4823**disease incidence***Phomopsis theae*, tea 5662**Pruning and training contd.****disease incidence contd.***Pseudomonas solanacearum*, tomato 4568**drought damaged plants**, citrus 3988**economics****apple** 3398**grapevine** 8546**espalier**, apple 5719**fan**, shoots per plant, grapevine 8544**flower bud****initiation****peach** 3482**tea** 3268**flowering****date**, grapevine 572**rose** 7945**frost**, resistance, grapevine 5110**frost damaged plants**, grapevine 1098**fruit****bunch****size**, grapevine 5120**weight**, grapevine 568, 572**colour**, apple 3396**composition**, apple 2564**distribution**, mandarin and tangerine 8067**number**, apple 4968**quality**, apple 3396**ripening**, grapevine 572**set**, apple 4197**size****apple** 2564, 4968**tomato** 7780**sugar content**, grapevine 572**"fruit-branch concentration" method**,**peach** 5035-5036**fruit trees and plants**, book 2527**goblet****labour requirements**, peach 6627**peach** 4255, 6627**growth-fruit relationships**, apple 941-943**Guyot****grapevine** 6742**sugars**, content, grapevine 8550**hail damaged plants**, olive 4823**hedgerows**, apple 4196**high density planting**, apple 3401**historical survey**, fruit trees and plants 4161**labour requirements**, grapevine 8546**leaf****distribution**, mandarin and tangerine 8067**nutrients**, content, grapevine 2727**leaf bud**, development, tea 3268**light intensity****apple** 7360**grapevine** 5834**mechanical****annual report**, Australia 1466**apple** 4230**apricot** 4230**blueberry** 8493**equipment****apple** 4230, 5703**apricot** 4230**pear** 4230, 5703**plum** 5703**tea** 3285**grapevine** 3573, 6739**annual report**, USA 3516, 7490**hedge clipper**, azalea 2286**lemon** 5554**pear** 4230**slotting saw**, apple 3396, 4196**mechanical harvesting****black currant** 2676**grapevine** 4346, 5143**olive** 2425**plum** 1848**mechanical tying**, materials, raspberry,**annual report**, Irish Republic 1857**methods compared****apple** 3398, 6546-6547, 7360,**7362-7363, 8364, 8366, 8379****annual report**, Irish Republic 1720**cucumber and gherkin** 3681**disease incidence**, peach 8455**economics**, apple 7366**flowering**, apple 8363**fruiting****apple** 4967, 7361, 7365-7366, 8363

- Pruning and training** *contd.*
 methods compared *contd.*
 fruiting *contd.*
 pear 6641
 grapevine 1104, 2717–2718, 4347, 6741, 6765, 7563, 8545, 8547–8548
 annual report, Czechoslovakia 6713
 growth correlations, apple 4967
 lemon 3109
 light absorption, apple 4963
 peach 4254–4255, 5037, 6626, 8379
 pear 3489
 protected cultivation, lemon 3110
 shoot growth, apple 8363
 tea 3270, 8267
 tomato 6906
 work studies, apple 8365
 nurseries, methods compared, apple 7363, 8348
 palmette
 apple 2565–2566
 carbohydrates, metabolism, apple 3399
 fruit trees and plants 5704
 labour requirements, peach 6627
 peach 2566, 4255, 6627, 8455
 plum 1849
 pear, annual report, Australia 450
 persimmon 2431
 photosynthesis, apple 4185
 pinching
 capsicum 3774
 ornamental plants, annual report, UK 4606
 post-prune growth
 apple 4966
 starch content, tea 3283
 prostrate forms, root growth, apple 8372
 regeneration
 apple 4192–4193
 olive 4823
 orange 5553
 review, cherry 7428
 rootstock relationships, apple 8364
 shoot bending
 apple 7362
 carbohydrates, metabolism, apple 3414
 growth substances, endogenous, apple 8367
 phloridzin content, apple 4998
 shoot direction, grapevine 4353
 shoot incision, rose 3923
 shoot length
 grapevine 8549
 varietal behaviour, grapevine 6740
 slender spindle
 apple 4195, 5719
 fruit trees and plants 5704
 stem height, sugars, content, grapevine 8550
 time of
 apple 7364
 grapevine 6765
 pear 6640
 tea 8266
 temperature, apple 8368
 tipping, grapevine 5116
 translocation disruption, fruit trees and plants 910
 transpiration, apple 5741
 tree orientation
 flowering, apple 3417
 growth reduction, apple 3417
 trellis, tomato 6906
 trellis systems, grapevine 6743
 trellising
 growth correlations
 pear 6639
 persimmon 6639
 tropical crops, annual report, Nigeria 4035
 two-armed cordon, grapevine 6742
 varietal behaviour
 apple 8360, 8364
 grapevine 8547
 water relations, apple 5741
 wirework construction, hop 5508
 wound dressings, fruit trees and plants 8327
 wound healing, cherry 8433
- Prunus armeniaca***
 as a rootstock, apricot 2611
 as rootstocks, stone fruits 8321
- Prunus* *contd.***
P. avium
 cyanide, biosynthesis 2626
 glycosides 2626
 as a rootstock
 cherry
 annual report, Netherlands 2516
 virus incidence 999
P. besseyi
 tissue culture, callus, cyanide toxicity 4260
 varieties, register, USA 4156
P. cerasides, as rootstocks, stone fruits 8321
P. cerasus, var. *pissardii*, diseases, *Phyllosticta prunicola* 6657
P. cornuta, as rootstocks, stone fruits 8321
P. fruticosa, as a rootstock, cherry 5018
P. insititia, as a rootstock for, peach 3468
P. laurocerasus
 carbohydrates, biosynthesis, temperatures, low 7060
 growing, in containers, media 4689
 organic acids, content, seasonal variations 3926
P. mahaleb
 growth substances, responses, chlormequat 8329
 propagation, cuttings, treatment, growth substances, IBA 6616
 as a rootstock, cherry, virus incidence 999
 weed control, nurseries 7316
P. mume
 enzymes, leaf, taxonomy 7419
 taxonomy, enzymes 7419
P. napaulensis, as rootstocks, stone fruits 8321
P. persica
 as rootstocks, stone fruits 8321
 seedlings, as rootstocks, cherry, virus incidence 999
P. persica* var. *aposarca, as a rootstock, peach 4243
P. sibirica, as a rootstock, apricot 2611
P. spp.
 breeding, rootstocks, cherry 64
 diseases
 plum pox 4949
 stem pitting virus 511
 detection 1825
 Tranzschelia spp., report, Australia 3344
 Xanthomonas pruni 915
 enzyme activity, frost resistance 7477
 flower, bud initiation 4290
 fluorine, toxicity, plant tolerance 7845
 frost
 injury, flower bud, development 4290
 resistance
 enzyme activity 7477
 respiration 7477
 water relations 7061
 herbicides, injury, atrazine 1041
 hybrids
 drought resistance 4287
 heat resistance 4287
 as a rootstock
 cherry 4234
 peach 76
 triple, as a rootstock, peach 1014
 leaf
 anthocyanins 744
 composition, enzyme 32
 phenolic compounds 744
 ornamental, propagation 26
 propagation 26
 cuttings
 growth substances, IBA 3509
 root 5797
 rooting capacity 905
 wounding 3509
 respiration, frost resistance 7477
 root, growth, development, soil, temperature 3925
 as a rootstock
 apricot 991
 cherry 495, 4234
 damson 1040
 plum 1040
 soil
 temperature
 root development 3925
- Prunus* spp. *contd.***
 soil *contd.*
 temperature *contd.*
 root growth 3925
 sulphur dioxide
 injury
 annual report, Netherlands 5698
 plant resistance 7845
 tissue culture
 shoot
 growth substances, concentration, root development 4240
 phenols, metabolism, root development 4240
 root development 4240
 virus-tested plants, EMLA scheme 7320
 water relations, frost resistance 7061
P. tenella, annual report, Canada 2910
P. tomentosa, tissue culture, callus, cyanide toxicity 4260
P. triloba
 flower, cut, fluorine injury, tap water 2913
 forcing, annual report, Netherlands 6127
Pseudaulacaspis pentagona, peach pests, annual report, USA 451
Pseudococcus citri, biological control, citrus pests, annual report, Cyprus 3980
P. comstocki
 forecasting, apple pests 1757
 population survey
 sex traps
 citrus pests 5565
 mulberry pests 5565
P. maritimus
 apple pests 1767
 grapevine pests 5862
Pseudodoniella typica, cacao pests 2444
Pseudomonas agarici, mushroom diseases 2904
P. cepacia
 histology, onion diseases 5311
 infection process, onion diseases 5310
 onion diseases 6883
P. ciccaronei, carob diseases 3984
P. cichorii
 celery diseases, annual report, USA 4367
 frost, injury, cabbage diseases 146
P. cumini, cummin diseases 1406
P. eriobotryae, loquat diseases 5587
P. fluorescens
 antagonistic to, *Pseudomonas tolaasii*, mushroom 3828
 antagonistic to, *Pseudomonas tolaasii*, mushroom 2905
 bean (*Phaseolus*) diseases 5247
 beetroot diseases 7614
 pea diseases 651
 tomato diseases 5247
P. lachrymans
 aerial spraying, cucumber and gherkin diseases 1195
 watermelon diseases 5219
P. maculicola, frost, injury, cabbage diseases 146
P. marginalis
 frost, injury, cabbage diseases 146
 lettuce diseases 5916
P. mors-prunorum
 cherry diseases, annual report, German federal Republic 6504
 phytoalexins, production, bean (*Phaseolus*) diseases 7705
 population studies, peach diseases 5040
Pseudomonas phaseolicola
 bean (*Phaseolus*) diseases 178, 5246
 report, USA 1940
 phytoalexins, production, bean (*Phaseolus*) diseases 7705
 races, bean (*Phaseolus*) diseases 8686
 resistance, bean (*Phaseolus*) diseases 2022
 seed germination, bean (*Phaseolus*) diseases 8677
 toxins, bean (*Phaseolus*) diseases 176–177
 varietal resistance, bean (*Phaseolus*) diseases 168
P. pisi
 frost, injury, pea diseases 4503
 incidence, pea diseases 4503
 pea diseases 650–651
 varietal resistance, pea diseases 721

Pseudomonas contd.***P. solanacearum***

- incidence, tomato diseases 4568
- resistance, cabbage diseases 2760
- rootstock resistance, eggplant diseases 4545
- seed germination, bean (*Phaseolus*) diseases 8677
- varietal resistance
 - bean (*Phaseolus*) diseases 1205
 - eggplant diseases 1271, 5329, 8759
 - tomato diseases 7770

P. spp.

- antagonistic to
 - Colletotrichum lagenarium*, melon (cantaloup and musk) 5952
 - Fusarium roseum*, carnation 2922
 - Pseudomonas tolaasii*, mushroom 3828
- antagonistic to, *Pseudomonas tolaasii*, mushroom 2905
- cherry diseases, annual report, UK 8318
- control, cherry diseases, annual report, USA 8319
- inoculation, seedling growth, cucumber and gherkin 5212
- mango diseases 8162
- pea diseases 651
- peach diseases 5770
- plum diseases, annual report, UK 8318
- resistance, breeding and selection, cherry diseases, annual report, UK 3346
- rootstock resistance, cherry diseases 5018
- soil, micro-organisms, replanting, grapevine 1105
- symptoms, geranium diseases 8869
- tomato diseases, annual report, Canada 3603
- watermelon diseases 2769

P. syringae

- Allium* spp., diseases 2083
- apple diseases 3407
- apricot diseases 7423
 - annual report, German Federal Republic 8315
- flower infection, pear diseases 4276
- onion diseases 2083
- onion, welsh, diseases 2083
- pea diseases 651
- peach diseases 2083
- population studies, pear diseases 4277
- resistance, cabbage diseases 2760
- shallot diseases 2083

Pseudomonas tolaasii

- biological control, bacteria, mushroom diseases 2905, 3828
- mushroom diseases 4600
- annual report, Australia 5882

P. viridiflava*, pea diseases 651**Pseudonitzschia szentii*, biological control,**

- coconut pests 9158

Pseudoperonospora cubensis

- cucumber and gherkin diseases 2000, 5206
- annual report, USA 4368
- squash diseases, annual report, USA 8585
- varietal resistance, cucumber and gherkin diseases 5945
- watermelon, annual report, USA 4368

Pseudoperonospora humuli

- forecasting, hop diseases 345, 6277
- hop diseases 1419, 3045, 4748
- annual report, German Federal Republic 7064
- host-parasite relationships, hop diseases, annual report, UK 3954
- incidence, hop diseases 6277
- infection process, stomatal opening, hop diseases 5510
- resistance, breeding and selection, hop diseases, annual report, UK 3954

Pseudopeziza ribis

- black currant diseases 5731
- annual report, UK 1856, 3515, 7489
- small fruits, diseases, annual report, Irish Republic 1857

P. tracheiphila*, grapevine diseases 5131**Pseudoplusia includens*, celery pests, annual report, USA 4367*****Psidium* spp.**

- growing, tropical America 377
- as a rootstock, guava 5626

Psila rosae

- carrot pests 5374

annual report

- Irish Republic 1939
- Netherlands 6772
- New Zealand 5152
- UK 1934, 3614, 5154

celery pests, annual report, German

- Federal Republic 8579
- control, carrot pests 6942

***Psophocarpus palustris*, as a cover crop, oil**

- palm 7209

Psoralea corylifolia*, flavones 9047**Psychotria* spp., alkaloids 7097*****Psylla piri*, pear pests 5738*****P. pyri*, control, pear pests, annual report,**

- USA 8319

P. pyricola

- host-pest relationships, pear pests 1838

- pear pests 8467

P. spp.

- biological control, pear pests 5051
- control, pear pests 5052
- pear pests 1744

***Ptelea* spp.**

- alkaloids 9048
- content 773
- coumarins, content 773

Pteronolobos persicae*, almond pests 459**Pteronidea ribesii*, gooseberry pests 2680*****Pterostichus melanarius* 2703*****Puccinia allii*, leek diseases 661*****Puccinia caricina*, gooseberry diseases,**

- annual report, Netherlands 5073, 6670

***P. chrysanthemi*, varietal resistance,**

- chrysanthemum diseases 5405

***Puccinia horiana*, chrysanthemum diseases**

- 3319, 4628

P. menthae*, mint diseases 6261**P. pelargonii***

- geranium diseases

- annual report

- Austria 265

- Netherlands 6127

P. pelargonii-zonalis

- control, geranium diseases 7848

- fungal parasites, geranium diseases 6982

- geranium diseases 2929

- heat treatment, geranium diseases 8868

***P. stenotaphri*, *Stenotaphrum secundatum*,**

- diseases 6197

Pueraria javanica

- as a cover crop

- coconut 9147, 9156

- manila hemp, pest incidence 2437

***P. phaseoloides*, as a cover crop, oil palm**

- 7209

P. spp.

- as a cover crop, citrus 5551

- ground cover plants, coffee 7190

***Pullularia* spp., vectors, aphids, bean (*Vicia*)**

- diseases 8708

Pummelo

- breeding and selection, frost resistance

- 3106

- as a pollinator, orange 8090

- polyembryony 9079

Pummelo fruit

- aroma 7171

- flavonoids 8102

Pummelo propagation, under mist 5677**Pumpkin**

- amino acids, metabolism 161
- breeding and selection, annual report, Zambia 8587
- chloroplast, development, growth substances 2780
- electrical potential, measurement 3687
- enzyme activity
 - inhibition, strophanthin 2778
 - proteins, biosynthesis 161
- enzymes
 - root 7692
 - seed, germination 7693
- flowering, seed sowing date 6810
- light, intensity, measurement 1675
- phosphorus, metabolism 2071
- potassium, translocation, enzyme activity, root 2778
- proteins, biosynthesis, enzyme activity 161
- sodium, translocation, enzyme activity, root 2778

Pumpkin contd.**tissue culture**

- cotyledons 5229
- growth substances 2780
- hypocotyl 5229
- root, electrical activity 5224
- shoot, electrical activity 5224

Pumpkin diseases

- bean yellow mosaic, varietal resistance 7684
- Choanephora cucurbitarum* 4455
- Erwinia tracheiphila*, varietal resistance 5218
- melon mosaic virus 159
- Sphaerotheca fuliginea*, seed treatment 6861

Pumpkin growth substances**cell**

- metabolism
 - BAP 2780
 - GA 2780
 - IAA 2780
- chloroplast
 - development
 - BAP 2780
 - GA 2780
 - IAA 2780

Pumpkin nutrition

- nitrogen, phosphorus deficiency 161
- phosphorus, deficiency 161

Pumpkin plant, composition, arginine 161**Pumpkin root, composition 2071****Pumpkin seed**

- germination, enzymes, content 7693
- sowing, dates, India 6810
- storage 1185
- treatment, fungicides, benomyl 6861

Pumpkin varieties 4371

- annual report, India 3607
- disease resistance
 - bean yellow mosaic 7684
 - Erwinia tracheiphila* 5218

Punica* spp., propagation, cuttings 2168**Puya* spp., trichome, anatomy, morphology 6199*****Pycnarrhena ozantha***

- alkaloids 6311
- medicinal properties 6311

Pyracantha

- cold, resistance, photoperiodism 5485
- frost, resistance, varieties, France 2158
- light
 - far-red, cold resistance 5485
 - red, cold resistance 5485
 - photoperiodism, cold resistance 5485
 - winter hardiness, nitrogen nutrition 2311

Pyracantha diseases

- Fusarium oxysporum* control 7963
- pathogenicity tests 7963

Pyracantha nutrition

- nitrogen 2311
- winter hardiness 2311

- potassium 2311

Pyracantha propagation, cuttings, media

- 708

Pyracantha spp.**diseases**

- Erwinia amylovora*, varietal resistance 2310

- Fusicladium pyracanthae*, varietal resistance 2310

varieties

- disease resistance 2310
- Mohave 2310

Pyracantha varieties, frost resistance 2158***Pyrenochaeta lycopersici***

- control, tomato diseases 8779
- nutrient absorption, tomato diseases 7798

- varietal resistance, tomato diseases 2109

***P. terrestris*, varietal resistance, onion**

- diseases 1253

Pyrethrum

- flavonoids, content 2331
- glycosides, content 2331
- pyrethrins, determination 3049
- terpenes 7966
- tissue culture, capitulum 9012

Pyrethrum propagation, capitulum, tissue

- culture 9012

***Pyrilla* spp.**

- aerial spraying, sugar cane pests 4893

***Pyrilla* spp. contd.**

sugar cane pests 2473

Pyrus floribunda, as weeds, blueberry 8492***P. melanocarpa***, as weeds, blueberry 8492***P. piraster***

fruit, morphology 4270

seed

germination 4270

ripening 4270

P. spp.

catechins, content, shoot, leaf, seasonal

variations 6646

classification 5781

flavonoids, content, shoot, leaf, seasonal

variations 6646

hybrids, phenolic compounds, content,

leaf 1839

phenolic compounds, content, shoot, leaf,

seasonal variations 6646

as a rootstock, pear 1032

Pythium aphanidermatumbean (*Phaseolus*) diseases 4475

citrus diseases 2392

disease complex, grapevine diseases 6756

lawns and sports turf, diseases, annual

report, USA 6129

magnesium nutrition, stock diseases

2205, 5412

tomato diseases 4574

P. arrhenomanes, soil micro-organism

antagonism, sugar cane diseases 415

P. butleri, post-harvest dips, bean(*Phaseolus*) diseases 8706***P. debaryanum***, *Panax ginseng*, diseases

3052

P. irregulare, disease complex, grapevine

diseases 6756

Pythium myriotylum

magnesium nutrition

marigold diseases 2205, 5412

tomato diseases 2205, 5412

P. polymorphon, pineapple diseases 3249***P. splendens***, control, *Scindapsus* spp. 6204***P. spp.***bean (*Vicia*) diseases, annual report, UK

5153

bulb treatment, tulip diseases 2259

celery diseases 2144

control

cacti, diseases 8921

cauliflower and broccoli diseases 6920

lily diseases 7902

pea diseases 6920

tomato diseases 6920

cucumber and gherkin diseases 621

annual report, German Federal

Republic 7598

eggplant diseases 1274

host enzyme activity

cauliflower and broccoli diseases 8791

pea diseases 8791

tomato diseases 8791

parsley diseases 3014

planting, mechanical, pot plants 5393

seed treatment, coffee diseases 3193

soil moisture, oil palm diseases, annual

report, Nigeria 9181

strawberry diseases 108

P. ultimumbean (*Phaseolus*) diseases, annual report,

German Federal Republic 8579

cauliflower and broccoli diseases 1171

disease complex, grapevine diseases 6756

poinsettia diseases 2283

seed treatment, pea diseases 7731

P. vexans, control, carnation diseases 7851***Quadrascidiotus perniciosus***

apple pests, annual report, German

Federal Republic 6506

control

cherry pests 7322

plum pests 7476

fruit trees and plants, pests 1759, 7322

tree fruits, pests, annual report, Rhodesia

4149

Quillaja saponaria, saponins 9049**Quince**

breeding and selection 6664-6665

chlorogenic acid

content

fruit, seasonal variations 7484

leaf, seasonal variations 7484

historical survey 1854

Quince contd.

planting

high density, Switzerland 904

survey, Switzerland 904

pollen, amino acids, content 5744

as a rootstock, pear 1032, 3490, 5782

wild, world distribution 1854

Quince diseases*Entomosporium maculatum* 8478*Erwinia amylovora*, alternative hosts

6519

Monilia linhartiana 4292*Sclerotinia cydoniae* 5800

control 8479

S. fructicola 5800*S. fructigena* 5800*S. laxa* 5800*S. mespili* 5800

virus, review 4291

Quince flower, pistil, amino acids, content

5744

Quince pests*Cydia molesta* 2662

mites, biological control 29

Quince varieties

comparative studies, Rumania 7482

comparative trials, USSR 7483

disease resistance, *Entomosporium**maculatum* 8478

Triumph 6664

Turkey 1854, 6665

Quinine

alkaloids, content, pruning 4762

pruning and training, alkaloids, content

4762

Rabbits, damage, annuals, pests 4616**Radioactive substances**

absorption, reduction, clinoptilolite, bean

(*Phaseolus*) 2789

soil-plant relationship studies, symposium

6484

Radioactivity

natural

black currant 1843

pear 1843

Radish

amino acids, metabolism, growth

substances 6803

annual report

Austria 114

German Federal Republic 7597, 8579

Netherlands 8581

UK 6774, 8583

USA 4368, 8585

bolting, growth substances 5941

breeding and selection 4587, 7666

chlorophyll, content, growth substances

7668

chloroplast

development, herbicides 5202

structure, herbicides 5202

enzymes, leaf 5895

growing

growth chambers 5201, 6802

media, compared 7605

peat 7605

under glass 1139

herbicides

chloroplast

development, haloxydine 5202

structure, haloxydine 5202

insecticides

injury, carbamates 2742

persistence 619

soil, Disyston 1180

residues 1173, 3328

root

dimethoate 4438

trichloronate 4438

irrigation

drip, water composition 8638

flood, water composition 8638

sprinkler 116

sub-surface, water composition 8638

light

far red, photosynthesis 7806

red, photosynthesis 7806

medicinal properties 5168

ozone, injury, varietal resistance 5178

photoperiodism 2881

nitrate accumulation 1144

photosynthesis

far red light 7806

Radish contd.

photosynthesis contd.

oxygen concentration 7709

red light 7806

respiration, leaf 7709

pigments, metabolism, light 2766

pollen

germination 7671

morphology 7670

physiology 7670

pollination, compatibility 7671

proteins, content, seed germination 8641

respiration

leaf

oxygen concentration 7709

photosynthesis 7709

steckling

planting

spacing 3671

time 3671

storage, temperature, shoot, growth 5942

sugars, translocation 8639

tissue culture

cotyledons 1181, 6804

sucrose treatment 153

root

cell, division, growth substances

3673

growth substances, treatment 2073,

5940

senescence 5940

topping, methods compared 5942

translocation, studies 8639

transpiration, antitranspirants 3333

weed control, review 5939

Radish diseases

cabbage yellows, incidence 614

Streptomyces scabies 3672

virus, vectors 1180

Radish growth substancesamino acids, metabolism, N-*n*-butyl-N'-

aryl thiourea 6803

bolting, MH 5941

cell

development

auxins 3673

BA 3673

chlorophyll, content, ethephon 7668

injury, annual report, German Federal

Republic 7598

leaf

senescence, urea cytokinins 8640

size, ethephon 7668

responses, MH 5941

root

size, ethephon 7668

storage

shoot growth

aminozide 5942

MH 5942

sucrose, content, ethephon 7668

Radish leaf

composition 3675

senescence, growth substances 8640

size, growth substances 7668

sucrose, content, growth substances 7668

Radish nutrition

cadmium

absorption 4437

calcium nutrition 4437

calcium, cadmium absorption 4437

molybdenum, soil, micro-organisms 618

nitrogen 1950

ammoniacal concentration 1968

nitrate accumulation, photoperiodism

1144

NPK, seed, production 616

Radish pests*Athalia proxima* 619*Ditylenchus dipsaci* 3878*Hylemya brassicae* 1173*H. spp.*, seed treatment 4438*Lipaphis erysimi* 1180*Myzus persicae* 1180**Radish root**

absorption 230

cell, division, growth substances, tissue

culture 3673

composition, growth substances 5941

histology 230

size, growth substances 7668

sucrose, content, growth substances 7668

thiocyanates 3674

Radish seed
 germination
 inhibition, N-phenacetyl amino acids 8637
 proteins 8641
 production 616
 steckling
 planting
 spacing 3671
 time 3671
 sowing, spacing, seed production 616
 treatment, insecticides 4438

Radish soil
 micro-organisms
 identification 617
 population studies 618
 pH 1968
 temperature, disease incidence 614
Radish varieties 4435

Biser 7667
 comparative trials
 Czechoslovakia 6801
 USSR 4436
 early harvesting 7667
 edible leaves 7667
 greenhouse 5200
 growth chambers, commercial crop production 6802
 ozone, injury, resistance 5178
 report, Sri Lanka 2733
 Sweden 115
 world collection 6801
Radopholus similis
 alternative hosts
 banana pests 7608
 coffee pests 7608
 eggplant pests 7608
 sugar cane pests 7608
 tomato pests 7608
 banana pests 827
 annual report, Western Samoa 8122
Calathea makoyana, pests, annual report, Belgium 8835
 citrus pests 2394
 control, banana pests 9133
 okra pests 2394
 pest-growth correlation equation, banana pests 826
 pineapple pests 2394
 rootstock resistance, citrus pests, annual report, USA 2375
 soil treatment, banana pests 6387
 tomato pests 2394

R. spp.
 heat treatment, banana pests 5605
 rhizome dips, banana pests 5605

Rainfall
 disease incidence
Alternaria spp., vegetables 5166
 bean (*Phaseolus*) 2011
Botrytis cinerea, strawberry 7539
 narcissus, annual report, UK 2153
 fruit
 acidity, grapefruit 4815
 maturity, grapefruit 4815
 set
 cacao 1549
 time from flowering, grapevine 587
 leaf, quality, tea 8279
 pest incidence, bean (*Phaseolus*) 2011
 plant nutrition, bean (*Phaseolus*) 5975
 protection
 paper, date, annual report, Tunisia 3981
 plastic
 date, annual report, Tunisia 3981
 vegetables 5166
 shoot, growth, tea 4901, 4905
 stimulation, cloud seeding 4922
 sucrose, content, sugar cane 9232
 temperature, correlation, fruit, yield, grapevine 562
 yield variations, coconut 9148
Rambutan fruit, aroma 7171
Ramularia deusta, control, sweet pea diseases 7885
R. phaseoli, bean (*Phaseolus*) diseases 4474
Ranunculaceae, ornamental species, Denmark 3863
Ranunculus spp.
 diseases
 cucumber mosaic virus 1369
 tobacco necrosis virus 1369

Ranunculus spp. contd.
 as weeds, grapevine 5839-5840
Raphanus sativus, types, classification 5199
R. spp., classification 4435

Raspberry
 annual report
 Belgium 4297
 Canada 2669
 Irish Republic 1857
 UK 1855, 3514, 5076, 7489
 USA 5077
 breeding and selection 5084
 annual report
 Canada 7488
 Sweden 5075
 USA 1440, 5078
 male sterility 1054-1055
 Netherlands 5085
 survey, wild populations, Canada 4314
 chlorophyll, content, seedling, seed treatment 5807
 dormancy, breaking, temperature 907
 economics
 EEC 3343
 UK 3343
 growing
 German Federal Republic 7506
 Italy, book 5805
 symposium, Canada 8500
 harvesting
 mechanical 1046
 shakers 6684
 time of 5811
 herbicides
 injury, dichlobenil 2685
 residues
 soil
 chlorthiamid 6542
 dichlobenil 6542
 irrigation, trickle 1046
 labour requirements 7491
 mulching, plastic 3524
 photosynthesis, seedling, seed treatment 5807
 planting, spacing 6681, 7508
 pollen, viability 5088
 pollination, cross- and self- compared, fruit set 5088
 production and trade
 EEC 3343
 UK 3343
 pruning and training
 Gjerde method 4316
 mechanical harvesting, annual report, New Zealand 5074
 topping height 4316
 research, review 2670
 storage, wax coatings 5811
 temperature, dormancy, breaking 907
 transport 5089
 water relations, flower bud, initiation 1058
 weed control 2685, 6542, 8489
 annual report, Canada 6668
 wind, protection 5808
 winter hardiness 2684
 pest damaged plants 2684

Raspberry diseases
 arabis mosaic virus 531
Botrytis cinerea 7509
 calico 530
Didymella applanata 2687, 7509
Leptosphaeria coniothyrium 2687
 mosaic 5810
 mosaic viruses, control, shoot-tip culture 1864
Phytophthora spp., soil, fumigation 5087
Rubus stunt 3525
Sphaceloma necator, incidence, annual report, German Federal Republic 6669
 tobacco streak 2686
 tomato ringspot 5810
 transmission, seed 8490
 virus, vectors 4317
 virus, unspecified, symptoms 6683
Raspberry flower
 bud initiation
 cane, size 1058
 growth substances 1058
 water relations 1058

Raspberry fruit
 ascorbic acid, content, plant nutrition 6682
 colour 7510
 composition 101
 plant nutrition 6682
 vitamins, freeze dried 112
 development, partially male-sterile clones 1055
 loosening, growth substances, ethephon 5801
 pigments 1865
 content 7510
 quality
 harvesting time 5811
 wax coatings, calcium nutrition 5811
 ripening, pigments 7510
 set, pollination 5088
 size
 harvesting time 5811
 planting, spacing 6681
 wax coatings, calcium nutrition 5811
 sugars, content, plant nutrition 6682
Raspberry growth substances
 flower bud
 initiation
 aminozide 1058
 ethephon 1058
 fruit, loosening, ethephon 5801
Raspberry leaf
 composition, seasonal variations 5809
 nutrients, content 5809
Raspberry nutrition
 calcium, fruit, quality 5811
 nitrogen 1057
 fruit, flavour 6682
 NPK 6682
Raspberry pests
Aceria gracilis, annual report, UK 3552
Amphorophora agathonica, varietal resistance 1863
Aphis idaei 5079
A. rubi 5079
Tetranychus telarius, damage, cold injury 2684
Thomasiina theobaldi
 integrated control 2688
 parasites, *Tetrastichus* spp. 2688
Xiphinema americanum 5810
X. bakeri 532
Raspberry propagation
 mulching, plastic 3524
 shoot-tip culture, virus-free plants 1864
Raspberry seed
 composition 101
 formation, pollination 5088
 treatment, potassium iodide 5807
Raspberry soil, fumigation, *Phytophthora* spp. 5087
Raspberry varieties
 annual report, Netherlands 6670
 cane production 7508
 Cherokee 7507
 comparative trials
 Denmark 3523
 Hungary 5086
 Dormanred 5806
 Glen Clova 1056
 Korea 1059
 Malling Admiral 1056
 Malling Exploit 5086
 Malling Orion 1056
 mechanical harvesting 6684
 pest resistance, *Amphorophora agathonica* 1863
 Phyllis King 1056
 Pocahontas 7507
 processing, Korea 1059
 register, USA 4156
 Shopka Alena 4315
 USSR 5084
Rats
 control
 bait box 3324
 sugar cane pests, annual report, USA 9221
 Warfarin blocks, coconut pests 7188
 zinc phosphide, sugar cane pests 8244-8246
 damage
 assessment
 coconut pests 1564
 sugar cane pests 4081

Rats *contd.*damage *contd.*

- coconut pests 2448
- disease incidence, *Trachysphaera fructigena*, cacao pests 4847
- sugar cane, review 1642
- sugar cane pests 9259
- Mexico, sugar cane pests 6440
- sugar cane pests, annual report, Australia 9219

Rauwolfia spp.

- alkaloids
 - biosynthesis, tissue culture 2333
 - content, flower removal 1437
 - production, tissue culture 5531
- flower, removal, alkaloids, content 1437
- growing, India 767
- growth substances, seed treatment, GA 352
- seed, treatment, GA 352
- tissue culture
 - alkaloids
 - biosynthesis, growth substances 2333
 - production 5531
 - leaf 351

R. suaveolens, alkaloids 9050**Rebutia marsoneri**

- flower
 - bud initiation, temperature, photoperiodism 6200
 - opening-closing, rhythms 6201
 - photoperiodism, flower bud, initiation 6200
 - temperature, flower bud, initiation 6200

Red currant

- annual report
 - Belgium 4297
 - Netherlands 6670
 - New Zealand 5074
- dormancy, breaking, temperature 907
- economics
 - EEC 3343
 - UK 3343
- fungicides
 - injury
 - copper oxychloride 4308
 - zineb 4308
 - residues
 - fruit
 - benomyl 4308
 - mancozeb 4308
 - maneb 4308
- harvesting, fruit, loosening 6678
- herbicides
 - decomposition, 2,4-D 7500
 - translocation, 2,4-D 7500
- labour requirements 7491
- mulching
 - peat 4190
 - plastic 7495
 - annual report, Yugoslavia 3517
- production and trade
 - EEC 3343
 - UK 3343
- temperature, dormancy, breaking 907
- tissue culture, shoot 2552
- weed control 7494

Red currant diseases

- Drepanopeziza ribis*
 - control, annual report, German Federal Republic 8481
 - varietal resistance 4308
- Gloeosporium* spp., varietal resistance 1048
- Mycosphaerella ribis*, varietal resistance 4308
- raspberry ringspot, annual report, Netherlands 5073
- Verticillium* spp., annual report, German Federal Republic 4298

Red currant fruit

- composition 101
- loosening
 - growth substances 6678
 - ethephon 5801

Red currant growth substances, fruit,

- loosening, ethephon 5801, 6678

Red currant pests

- Aphis grossulariae* 5079
- Cryptomyzus ribis* 5079
- Eriosoma ulmi* 5079
- Hyperomyzus lactucae* 5079

Red currant pests *contd.*

- Synanthedon tipuliformis* 6677

Red currant seed, composition 101**Red currant varieties** 1859

- comparative trials, Denmark 3518

disease resistance

- Drepanopeziza ribis* 4308
- Mycosphaerella ribis* 4308

Replanting

- apple 6551
- fruit trees and plants 6551
- soil, fumigation, rose, annual report, UK 6128

Report

- Australia, Adelaide, Waite Agricultural Research Institute 3344, 3602, 3831, 4094, 6712
- FAO, Technical Working Party on Cocoa Production and Protection 4046
- German Federal Republic, Geisenheim, Bundesanstalt für Qualitätsforschung Pflanzlicher Erzeugnisse, Geisenheim/Rheingau 8284
- Sri Lanka, Peradeniya, Director of Agriculture 6323
- USA

- Honolulu, Hawaii Agricultural Experiment Station, University of Hawaii 1940, 6130, 6324, 6382
- University of Georgia Agricultural Experiment Stations 8320, 8525

Resins, *Grindelia* spp. 8025**Respiration**

- bulb
 - ethylene, treatment, iris 2245
 - storage, onion 1148
- darkness, sugar cane, annual report, South Africa 7230
- diseased plants, *Luffa* spp. 3684
- diurnal variations
 - celery 2901
 - rhubarb 2901
- enzyme activity
 - kohl-rabi 6799
 - plum 7477
 - turnip 148-149
- flower, senescence, carnation 7852
- frost resistance
 - plum 7477
 - Prunus* spp. 7477
- fruit
 - apple 52
 - annual report, UK 8317
 - avocado 1465
 - banana 1544
 - calcium, content, apple 1771
 - development, apple 4993
 - ethylene
 - production 383
 - apple 56
 - gamma rays, avocado 1462
 - growth substances
 - apple 5003
 - chlormequat, apple 1786
 - ethephon, mandarin and tangerine 3149
 - IAA, apple 1772
 - maturation, citron 8094
 - nitrogen, content, apple 1771
 - Phytophthora citrophthora*, lemon 3153
 - pollination, apple 6581
 - post-harvest treatment, gamma rays 1504
 - ripening
 - apple 1772
 - apricot 8428
 - gooseberry 2682
 - storage
 - banana 3179
 - capsicum 4543
 - controlled atmosphere
 - ethylene, apple 981
 - strawberry 3558
 - pear 5792
 - temperature
 - avocado 9073
 - mandarin and tangerine 7153
 - tomato 2744
 - treatment, gamma rays, post-harvest, apple 7410-7411
 - virus diseases, apple 6565
 - water relations, banana 3179

Respiration *contd.*

- herbicides
 - tea 8265
 - tomato 6922
- leaf
 - anthocyanins, content, ornamental plants 8944
 - colour, ornamental plants 8944
 - cycloheximide, geranium 274
 - growth substances, strawberry 5819
 - light intensity
 - peach 3491
 - pear 3491
 - nitrogen nutrition, tea 3281
 - oxygen concentration
 - bean (*Phaseolus*) 7709
 - radish 7709
 - ozone, bean (*Phaseolus*) 1209, 8681
 - photosynthesis
 - bean (*Phaseolus*) 7709
 - radish 7709
 - plant nutrition, grapevine 5138
 - soil, pH, *Schizandra chinensis* 8968
 - temperature, grapevine 5138
 - toxins, fusaricocin, bean (*Phaseolus*) 3712
 - water relations, grapevine 5138
 - zinc nutrition, tomato 6080
- light duration, chrysanthemum 7860
- light intensity
 - chrysanthemum 7860
 - greenhouse crops 5683
- nitrogen, grapevine 7581
- photosynthesis 3296
- physiology 4
 - grapevine 7581
- plant
 - cold, resistance, pea 654
 - drought, temperate tree fruits 908
 - electron transport 1673
 - frost, resistance, pea 654
 - fungicides
 - apple 6578
 - stone fruits 4951
 - growth substances, pea 7738
 - humic acid
 - cucumber and gherkin 684
 - tomato 684
 - photosynthesis, bean (*Phaseolus*) 188
 - potassium nutrition, tomato 1295
 - storage
 - cabbage 1148
 - celery 1148
 - pod, cacao 384
- root
 - grapevine 5137, 5866, 7581
 - magnetic field, bean (*Vicia*) 6857
 - nitrogen nutrition, tea 3281
 - plant nutrition, grapevine 5866
 - salinity, tissue culture, carrot 6944
 - storage
 - carrot 1148, 2744
 - parsnip 1148
 - swede 1148
 - tissue culture, carrot 4592
- seed
 - avocado 1465
 - germination, pea 1227
- study, apparatus 870
- temperature
 - celery 2901
 - greenhouse crops 5683
 - kohl-rabi 6799
 - rhubarb 2901
 - storage, vegetables 2744
- tuber
 - growth substances, artichoke, jerusalem 8599
 - tissue culture, artichoke, jerusalem 8599
- wind
 - bean (*Phaseolus*) 5254
 - magnolia 5254
 - pea 5254
- zinc nutrition, tomato 6922

Rhabdoscelus obscurus

- biological control, sugar cane pests 5653
- integrated control, sugar cane 4099
- sugar cane pests 4099, 5653
- annual report, USA 9221
- report, USA 6382
- varietal resistance, sugar cane pests 4082

- Rhacodiella vitis**
control, grapevine diseases 6757
graftwood storage, grapevine diseases 3568
- Rhadinaphelenchus cocophilus**, coconut pests, annual report, Jamaica 4851
- Rhagoletis cerasi**
aerial spraying, cherry pests 8438
cherry pests 1000
annual report, German Federal Republic 6506
control
bait, cherry pests 1000
cherry pests 5763
annual report, German Federal Republic 7309
- R. fausta**, cherry pests 1001
- R. indifferens**, cherry pests 1001
- R. pomonella**
annual report, Canada 2515
apple pests, annual report, Canada 8314
- Rhamnus** spp.
growing, containers 2917
propagation
seed 2917
photoperiodism 2917
- Rhaphia hookeri**, growing, Nigeria, annual report, Nigeria 9181
- Rhaphidopalpa foveicollis**, annual report, Cyprus 3604
- Rheum** spp.
rhizome composition, glycosides 1425
root composition, glycosides 1425
- Rhinopetalum** spp., growing 5440
- Rhipsalidopsis** spp.
flower, bud initiation, temperature, photoperiodism 6200
photoperiodism, flower bud, initiation 6200
temperature, flower bud, initiation 6200
- Rhizobium leguminosarum**
carbon, pea 8716
root
nodule formation
seed treatment
sodium glutamate 4497
pea 5271
root secretions, pea 8716
seed, treatment, pea 208, 5271
- R. phaseoli**, root, nodule formation, insecticides, bean (*Vicia*) 201
- R. spp.**, inoculation, yield increase, pea 6003
- Rhizoctonia fragariae**, strawberry diseases 1886
- R. solani**
bean (*Phaseolus*) diseases, annual report, USA 4367
cabbage diseases, annual report, USA 4367
cacti, diseases 2267
Carissa grandiflora, diseases 2269, 3002
celery diseases, annual report, USA 4367
control, tomato diseases 8779-8780
cucumber and gherkin diseases, annual report, USA 4368
eggplant diseases 1274
geranium diseases 7864
herbicides, bean (*Phaseolus*) diseases 8687
host nutrition, azalea diseases 2987, 6225
lawns and sports turf, diseases, annual report, USA 8834
nematode complex, tomato diseases 8782
okra diseases 4529
Panax ginseng, diseases 3052
parsley diseases 3014
philodendron diseases, annual report, USA 8834
phytoalexins, bean (*Phaseolus*) diseases 8688
poinsettia diseases 2283
radish diseases
annual report
German Federal Republic 7597
German Federal Republic 8579
relative humidity, azalea diseases 6225
Scindapsus spp., diseases, annual report, USA 8834
seed-borne, bean (*Phaseolus*) diseases 5982
soil, treatment, beetroot diseases 122
temperature, azalea diseases 6225
- Rhizoctonia solani** contd.
tomato diseases 4574
- R. spp.**
Artemisia spp., diseases 336
celery diseases 2144
cucumber and gherkin diseases 621
Dioscorea spp., diseases 6297
ferns, diseases, annual report, USA 8834
fungicides, application, method, quintozene, lettuce diseases 1970
herbicides, capsicum diseases 2843
planting, mechanical, pot plants 5393
soil moisture, oil palm diseases, annual report, Nigeria 9181
- Rhizoglyphus** spp., gladiolus pests, annual report, USA 8834
- Rhizopus arrhizus**
fruit
ascorbic acid, content, apricot diseases 2616
phenolic compounds, content, apricot diseases 2616
packing straw treatment, pomegranate diseases 9118
- R. nigricans**
eggplant diseases 1274
peach diseases, annual report, Australia 5693
- R. nodosus**, *Dioscorea* spp., diseases 6297
- R. spp.**
cherry diseases 5022
fruit storage, fig diseases 1010
heat treatment, papaw diseases 8171
peach diseases, annual report, USA 451
post-harvest dips, papaw diseases 8171
- R. stolonifer**
carrot diseases 695
fumigation, papaw diseases 7217
peach diseases 5780
post-harvest dips, papaw diseases 7217
- Rhizosphere**
micro-organisms
phosphorus nutrition
cabbage 8620
tomato 8620
- Rhodiola** spp.
flower, development 8933
seed
development 8933
germination 8933
- Rhodococcus bulgariensis**, control, rose pests 5502
- Rhododendron**
altitudes 2985
annual report
Belgium 8835
Irish Republic 2909
Netherlands 4604
USA 1315, 3835
book 7040
breeding and selection
annual report, Canada 8836
flower
colour 7041
pigments content 7041
shape 7041
containers, wood baskets, preservatives 6223
- Rhododendron**, enzyme activity, determination 1063
- Rhododendron**
enzymes, extraction 8949
glycosides 8036
growing
in containers 6223
weed control 8853
herbicides
application, mulches 8853
injury, dichlobenil 8851, 8853
moss control, nurseries 743
pigments
content, flower, breeding and selection 7041
determination 7041
report, USA 6130
steroids 2988
- Rhododendron** bud, initiation, annual report, UK 4605
- Rhododendron** diseases
Exobasidium spp.
host anatomy 8948
host-pathogen relationships, growth substances 8948
- Rhododendron** flower
bud, proteins, annual report, Canada 2910
colour, breeding and selection 7041
development, cytology 4703
shape, breeding and selection 7041
- Rhododendron** propagation
cuttings 6220, 7042
treatment, fumigants methyl bromide 747
- Rhododendron simsii**, taxonomy 7041
- R. spp.**, hybrids, interspecific 4701
- Rhododendron** varieties, comparative studies 8947
- Rhoeo** spp.
growth substances, cell, water permeability, decenylsuccinic acid 5313
leaf, cell, water permeability, growth substances, decenylsuccinic acid 5313
- Rhopalosiphum insertum**
apple pests, annual report, German Federal Republic 6506
population studies, apple pests, annual report, UK 3372
- R. maidis**, virus vectors, manila hemp pests 2437
- Rhubarb**
amino acids, metabolism, light 5318
annual report
Austria 114
UK 1937
carbohydrates, metabolism, dormancy 7759
cold, responses 7759
dormancy, carbohydrates, metabolism 7759
enzymes, leaf 5895
forcing
chilling requirements 7759
dormancy 7759
growing
as a medicinal plant 3062
tunnels 1260-1261
harvesting
time of
planting
spacing 5886
time 5886
light, intensity, photosynthesis 2901
organic acids 6783
photosynthesis, light, intensity 2901
planting
spacing 5886
time 5886
quinones 3085
respiration
diurnal variations 2901
temperature 2901
storage, cold, plants, carbohydrates, metabolism 7759
temperature, respiration 2901
tissue culture, leaf 5318
weed control 3062
Agropyron repens, annual report, UK 5885
annual report, UK 8583
- Rhubarb** diseases
Nectria radicola 8750
virus, annual report, UK 1934
- Rhubarb** stem, composition 101
- Rhus** spp.
leaf
anthocyanins 744
phenolic compounds 744
content 1403
- Rhynchophorus ferrugineus**
coconut pests 1563
annual report, Sri Lanka 7185
- R. spp.**, coconut pests 2444
- Ribes aureum**, self sterility 4305
- R. spp.** 6131
hybrids, diseases, *Gloeosporium* spp., resistance 1048
root
development, soil temperature 3925
growth, soil temperature 3925
shoot
anatomy 4304
breakage 4304
soil
temperature
root development 3925

Ribes spp. *contd.*soil *contd.*temperature *contd.*

root growth 3925

value

aesthetic 6131

functional 6131

Ribosome activity, drought, resistance, bean (*Phaseolus*) 2802**Ribosomes**diseased plants, bean (*Phaseolus*) 8701senescence, bean (*Phaseolus*) 8701**Richardia scabra**, as weeds, tomato 6904**R. spp.**, as weeds, peach 1016**Ringling**

avocado 8057

bridge development, *Ailanthus* spp. 3008

bud, abscission, pistachio 1039

flower bud

development, apple 7402

fruiting potential, grapevine 3592

initiation, grapevine 3592

fruit

bunch size, grapevine 3593

drop

cherry 8444

orange 4807

persimmon 3168

ripening, grapevine 3593

size

grapevine 3593

annual report, Cyprus 3560

mandarin and tangerine 803

orange 4807

fruiting relationships, apple 6545

growth substances

endogenous

grapevine 1928, 7586

orange 4807, 8083

leaf-fruit relationships, apricot 8427

photosynthesis, lemon 6353

sugars, metabolism, apple 3414

time of

fruit, size, orange 4006

grapevine 8570

Roadside

ground cover plants, annual report, USA

2152

salinity damage

Acer spp. 4715

trees and shrubs 313

turfgrasses, annual report, Canada

2910

trees and shrubs, annual report, USA

2152

Roadside plants

establishment, grasses 3888

growing, in containers 2978

lead, content, trees and shrubs 440

nutrient absorption, salinity damage, turf

grasses, annual report, Canada 2910

planting, WANE system, trees and shrubs

3908

suitability

trees and shrubs 2274

annual report, Canada 2910

weed control 8134

Rodenticides, zinc phosphide, residues,

plant, sugar cane 3258

Rodents, Mexico, sugar cane pests 6440**Roesleria hypogaea**, soil, micro-organisms,

replanting, grapevine 1105

Rollinia emarginata, bactericidal properties

9066

Root

composition, fruit, ripening, grapevine

1123

exudate

composition

bean (*Phaseolus*) 189bean (*Vicia*) 7725

cucumber and gherkin 189

photoperiodism, bean (*Vicia*) 7725

studies 6488

exudation 3

growth

control

container-grown plants 7847

copper, container-grown plants 7847

mulching, pear 936

seasonal variations, grapevine 5114

soil, cultivation depth, grapevine 5114

mucilaginous layer 4938

Root contd.

nodule

enzyme activity, nitrogen, fixing, pea

1229

nitrogen-fixing activity, soil, moisture

content 2040

nodule bacteria

bacterial contamination, pea 4469

enzyme activity, nitrogen, fixing, pea

1229

nodule formation

cobalt nutrition 2814

insecticides

bean (*Vicia*) 201

pea 652

molybdenum nutrition 2814

nitrogen nutrition 2814

ozone, bean (*Phaseolus*) 6840

pea 207

sodium glutamate, pea 5271

sampling, lawns and sports turf 3883

segment cutter 8286

-shoot relationships

apple, annual report, UK 3346

growth studies 5676

systems

apple 945

delphinium 1345

grapevine 7564

planting

spacing

apple 1740, 2548-2549

olive 4025

soil cultivation, black currant 4307

soil management

apple 1739

annual report, Netherlands 5697

study methods, fruit trees and plants,

book 1

trees and shrubs, bibliography 7281

Root crops, pests, *Lygus rugulipennis* 4429**Rootstocks**

selection methods, plant composition,

apple 928

storage, treatment, fungicides, rose, annual

report, Netherlands 4604

Rosa canina, as a rootstock, rose 2992**R. indica**, as a rootstock, rose 2992**Rosa multiflora**, as a rootstock, rose 2992,

4708

R. multiflora japonica, as a rootstock, rose

8951

R. rubiginosa, as a rootstock, rose 2992**R. rugosa**, as a rootstock, rose, annual

report, Irish Republic 2909

R. spp.

essential oil, composition 4714

flower, sepal, taxonomic value 4705

fruit, morphology 2989

growing, for hip production 2990, 2993

growth substances

endogenous

determination, xanthoxin 3719

seed 4707

identification 2989

nutrition, fertilizers, placement, seed drills

2993

seed

sowing, drills 2993

treatment

soaking, cold water 4707

stratification, growth substances,

content 4707

temperature, growth substances,

content 4707

vitamins 2990

water, absorption 4706

seedling, production, nutrition 2993

taxonomy

essential oil 4714

flower, biology 4705

winter hardiness 2292

R. wichuriana, flowering, genetics 317**Rosaceae**, fruit species, tropical America

5597

Rose

air pollution, sulphur dioxide, ethylene,

injury 6132

Annual, Royal National Rose Society

5470

annual report

Belgium 5386, 8835

Canada 2910

Rose contd.annual report *contd.*

German Federal Republic 7843

Irish Republic 2909

Italy 6960

Netherlands 4604, 6127, 6961

UK 2153, 4606, 6128

USA 1441, 6129, 8834

breeding and selection 318

essential oil, content 5471

review, India 8840

bromine contents, soil, fumigation, methyl

bromide 5394

carbohydrates, metabolism, seasonal

variations 338

carbon dioxide

supplementary

bud break 3921

flower

colour 7949

size 7949

flower bud, initiation 3920

enzyme activity, tissue culture 1395

essential oil 764

biosynthesis 4747

content

climate 7990

irradiation 5471

plant nutrition 3952

temperature 5471

water relations 3952

phosphorus, placement 3951

terpenes 9004

ethylene, flower, senescence 2297

flowering

light

artificial 5477

intensity 5477

photoperiodism, temperature 6230

pruning and training 7945

temperature, photoperiodism 6230

fluorine, toxicity, plant tolerance 7845

frost

injury, seed 2991

resistance, carbohydrates, content 338

fungicides, injury, folpet 2995

growing

book 7047

conifer bark humus 7855

for essential oil production 7990

under glass 7855

economics, Netherlands 1391

in greenhouses

temperature 8953

weed control 6226-6227

for hip production 8576

India 8840

media, coal ash 8857

peat 7855

nutrition, nitrogen 8941

herbicides, responses 8852

insecticides, injury, Plictran 4712

irradiation

gamma rays

essential oil, content 5471

mutation induction 5471

irrigation 4713

flower bud, drop 3952

plant nutrition 3952

light

artificial, flowering 5477

intensity

disorder incidence, petal blueing

7949

flowering 5477

interaction

photoperiodism 6230

temperature 6230

supplementary, flower, development

2293

mutants, induction, irradiation, gamma

rays 5471

nematicides

application

methods compared

aldicarb 7948

Vydate 7948

injury, Nemagon 1392

photoperiodism

interaction

light, intensity 6230

temperature 6230

physiology, annual report, USA 3835

Rose contd.

- planting
 - spacing 2291
 - economics 2291
- pruning and training 8576
 - cut flower production 3919
 - flowering 7945
 - shoot incision 3923
- report, USA 6130
- seedling, development, cotyledon removal 5478
- soiless culture, nutrient solution 2298
- sulphur dioxide, injury, plant resistance 7845
- temperature
 - disorder incidence, petal blueing 7949
 - essential oil, content 5471
 - flower
 - number 8953 *
 - size 8953
 - interaction
 - light, intensity 6230
 - photoperiodism 6230
- tissue culture
 - cell suspension
 - carbon dioxide requirements 8955
 - cell aggregation 8956
 - growth substances, treatment 8956
 - media pH 8955
 - pigments, biosynthesis 1395
 - enzyme activity 1395
 - pigments, biosynthesis 1394
 - stem cells 319
 - transport, vacuum cooling 2164
 - water relations, grafted and own-rooted plants compared 4713
 - weed control 8852
 - greenhouses 6226-6227
 - winter hardiness, varietal differences 2292, 5473

Rose bud

- break
 - carbon dioxide, supplementary 3921
 - growth substances
 - adenine 3921
 - BA 3921
 - GA 3921
 - pruning and training 3921
 - wounding 3921

Rose diseases 3319

- Diplocarpon rosae* 2995
 - control 5476, 8305
 - resistance 6266
 - varietal resistance 5473, 8950
- green petal 2295
- latent strawberry ringspot 7947
- mosaic, report, Australia 3831
- Phragmidium mucronatum* 6228
 - annual report, German Federal Republic 6959
 - varietal resistance 8950
- P. spp.*, varietal resistance 4709
- Sphaerotheca pannosa* 6229
 - annual report
 - Denmark 3298
 - UK 8838
 - control 5476, 7848
 - varietal resistance 4709, 8950
- S. spp.*, varietal resistance 5473

Rose disorders

- chlorosis
 - iron nutrition 6268
 - soil bicarbonate 2994
- petal blueing 7949

Rose flower

- bud drop
 - plant nutrition 3952
 - water relations 3952
- bud initiation 2996
 - carbon dioxide 3920
 - light 6230
 - photoperiodism 6230
 - temperature 6230
- colour, carbon dioxide, supplementary 7949
- composition, proline, seasonal variations 339
- cut
 - carbohydrates, translocation 2296
 - economics 4608
 - grading, mechanical 6232
 - nitrogen, metabolism 3924

Rose flower contd.

- cut contd.
 - packing
 - mechanical 6232
 - work studies 4704
 - preservatives 2997
 - growth substances 7950
 - abscisic acid 2301
 - nutrients 3924
 - sugars 7950
 - production 6231
 - programmes 6231
 - pruning 3919
 - temperature 8953
 - senescence 2297, 3922
 - ammonia, content 3924
 - xylem blockage 2290
 - stem length, temperature 8953
 - vase life 7950
 - xylem blockage 2997
 - development, light, supplementary 2293
 - grading, economics 749
 - number
 - nitrogen nutrition 748, 7946
 - potassium nutrition 748, 7946
 - temperature 8953
 - pigments 2300
 - quality
 - nitrogen nutrition 748
 - potassium nutrition 748
 - senescence 2297, 3922
 - size
 - carbon dioxide, supplementary 7949
 - temperature 8953
 - stem
 - length
 - nitrogen nutrition 7946
 - nutrition 2294
 - potassium nutrition 7946
 - terpenes 9004

Rose growth substances

- bud break
 - adenine 3921
 - BA 3921
 - GA 3921
- endogenous, flower, senescence 2297, 3922
- flower, senescence, abscisic acid 3922
- flowers, cut
 - preservatives
 - abscisic acid 2301
 - aminozide 7950
 - ancymidol 7950
 - chlormequat 7950
 - HQC 7950
 - SD-8339 7950
 - stomatal mechanism, ABA 194

Rose leaf

- removal, potassium iodide 2299
- stomatal mechanism 194

Rose nutrition 3952

- annual report, Netherlands 6962
- general, leaf analysis, symposium 2489
- green manures 6267
- iron, chlorosis 6268
- nitrogen 2294
 - flower
 - colour 2294
 - number 748, 7946
 - quality 748
 - stem length 7946
- NPK 6267
- phosphorus 7946
- placement 3951
- potassium 2294
 - flower
 - colour 2294
 - number 748, 7946
 - quality 748
 - stem length 7946

Rose pests

- Agrilus* spp. 7084
- Hemicriconemoides chitwoodi* 5132
- Meloidogyne hapla*, rootstock resistance 1393
- Pratylenchus penetrans*
 - nematicides, application, methods compared 7948
 - rootstock resistance 1393
- P. vulnus* 1392
- Rhodococcus bulgariensis*, control 5502
- Tetranychus telarius* 4710, 4712, 8954
- predators, *Phytoseiulus persimilis* 4711

Rose pests contd.

- Xiphinema diversicaudatum*, vectors, latent strawberry ringspot 7947

Rose propagation

- air-layering 5470
- budding
 - relative humidity 5475
 - shield 8951
 - T 8951
 - temperature 5475
 - tunnels, plastic 5475
- cuttings
 - containers, compared 3918
 - media, compared 3918
 - grafting, bench grafting 4708

Rose root, composition, proline, seasonal variations 339**Rose rootstocks**

- comparative trials 7048
- dormancy, breaking, annual report, UK 3833
- nematode resistance 1393
- propagation, seed, annual report, UK 3833
- review 2992
- Rosa multiflora japonica* 8951
- scion relationships, comparative trials 8952

Rose shoot, composition, proline, seasonal variations 339**Rose soil**

- bicarbonate, lime-induced 2994
- fumigation
 - injury, methyl bromide 5394
 - methyl bromide, plant composition, bromine 5394
- moisture
 - bicarbonate formation, lime-induced chlorosis 2994
 - green manures 6267
- salinity
 - chlorine 2161
 - plant, tolerance 2161
 - sodium 2161
- types, essential oil production 764

Rose varieties

- for arid regions 4713
- classification 5470, 5474
- comparative studies 8953
- comparative trials
 - Finland 8950
 - German Federal Republic 5472-5473
- disease incidence, latent strawberry ringspot 7947
- disease resistance
 - Diplocarpon rosae* 5473, 6266, 8950
 - Phragmidium* spp. 4709
 - Phragmidium mucronatum* 8950
 - Sphaerotheca pannosa* 4709, 8950
 - S. spp.* 5473
- identification 2989
- list 5474
- winter hardiness 2292

Rosellinia necatrix

- apricot diseases 63
- olive diseases 3166

R. spp., alternative hosts, narcissus diseases 7013**Rosemary**

- essential oil 4738
- determination 3024

Rosemary soil

- salinity
 - plant, tolerance 2161
 - sodium, chlorine 2161

Rosellinia necatrix

- fruit trees and plants, diseases 7318
- nursery stock, diseases 7318

Rotylenchulus reniformis

- citrus pests 2394
- okra pests 2394, 2460
- papaw pests 2460
- pineapple pests 2394
- population studies, tomato pests 6091
- tomato pests 2394
- varietal resistance, tomato pests 7771

Rotylenchus spp., sugar cane pests 7246

- R. unifomis*, carrot pests, annual report, Netherlands 6772

Rubber

- aluminium, determination 7227
- annual report, France 3250, 9205

Rubber *contd.*

- breeding and selection, disease resistance 844
 - clones
 - comparative trials
 - Indonesia 9206
 - Malaysia 7221–7222
 - disease resistance
 - Dothidella ulei* 8181
 - Pellicularia filamentosa* 8181
 - Phytophthora palmivora* 8181
 - Sri Lanka 9207
 - cover crops 8177
 - legumes 8178, 9211
 - defoliation, chemical 8183
 - enzyme activity, inhibition, prenyl pyrophosphates 2030
 - enzymes, latex 3254
 - ground cover plants, legumes 4881
 - growing
 - Liberia 8184
 - Malaysia 8176
 - herbicides
 - injury
 - bromacil 8180
 - diuron 9208
 - intercropping
 - banana 8178
 - cassava 8178
 - latex
 - enzymes 3254
 - lutoids 9216
 - production
 - growth substances 9217
 - ethephon 3255
 - physiology 9216
 - mulching, plastic, weed control 4077
 - parasitic plants, mistletoe 8184
 - planting
 - growth substances, treatments, IBA 7228
 - material, Malaya 8176
 - site preparation
 - forest tree felling
 - arboricides, disease incidence 7223
 - ringing, disease incidence 7223
 - pollen, studies 8186
 - production, annual report, Sarawak 4036
 - research
 - Cameroon, annual report, France 9205
 - Ivory Coast, annual report, France 9205
 - shade, weed control 9209
 - spraying, equipment 8185
 - tapping 8187
 - systems 6426
 - yield estimation 6426
 - weed control 1615, 4076, 4881, 5642, 6421, 7224, 8179, 9210–9211
 - Borreria* spp. 9208
 - Eleusine* spp. 9208
 - Imperata* spp. 9209
 - methods compared 4077, 7226
 - nurseries 7225, 8180, 9208, 9211
 - review 8121
 - wind, damage, clonal resistance 7222
 - yield, estimation, tapping systems 6426
- Rubber diseases**
- Ceratocystis fimbriata* 4078–4079
 - control 6384, 9212–9213
 - Colletotrichum gloeosporioides* 844, 6423–6424
 - clonal susceptibility 8182
 - seasonal susceptibility 8182
 - secondary leaf fall, prevention 8183
 - Corticium salmonicolor*
 - clonal resistance 7222
 - clonal susceptibility 844
 - die back 844
 - Diplodia* spp.
 - control
 - budding time 8181
 - cultural methods 8181
 - Dothidella ulei*, clonal resistance 8181
 - Fomes lignosus*
 - host reactions 5645
 - planting site, preparation 7223
 - general 8184
 - Gloeosporium* spp., clonal resistance 7222
 - leaf diseases 844

Rubber diseases *contd.*

- Microcyclus ulei*
 - Brazil 9214
 - control 9214
 - rainfall 9214
 - Trinidad and Tobago 9214
 - Oidium heveae*
 - book 6425
 - clonal susceptibility 8182
 - seasonal susceptibility 8182
 - secondary leaf fall, prevention 8183
 - O. spp.*, clonal resistance 7222
 - Pellicularia filamentosa*, clonal resistance 8181
 - Phytophthora palmivora* 8184
 - clonal resistance 8181
 - control 6384
 - root rots 844
- Rubber growth substances**
- application, methods, ethephon 8184
 - latex, production, ethephon 3255, 9217
 - responses
 - 2,4-D 8184
 - ethephon 8184
 - rooting, IBA 7228
- Rubber leaf**
- area, measurement 3251
 - fall
 - secondary 8182
 - prevention 8183
- Rubber nutrition** 864, 3252
- general
 - leaf analysis 5643–5644
 - soil analysis 5643–5644
 - magnesium, deficiency, soil, analysis 1616
 - nitrogen 1616, 6422
 - leaf analysis 1616
 - soil analysis 1616
 - phosphorus 1616, 3253
 - deficiency, symptoms 3253
 - leaf analysis 1616, 3253
 - soil analysis 1616, 3253
 - potassium 1616
 - leaf analysis 1616
 - soil analysis 1616
- Rubber pests** 1696
- Helicotylenchus* spp. 9215
 - insects 8184
 - mammals 8184
 - Meloidogyne incognita* 9215
 - mites 8184
 - Pratylenchus brachyurus* 9215
 - review, Bolivia 5671
 - Trichodorus christiei* 9215
- Rubber plant**
- anatomy
 - latex vessel rings 6420
 - latex vessels 6420
- Rubber propagation**
- budding 2462
 - time of, disease incidence, *Diplodia* spp. 8181
- Rubber soil, nutrients, Sri Lanka** 5644
- Rubia* spp., root, composition 758
 - R. tinctorum*, quinones, biosynthesis 5493
- Rubidium**
- absorption, leaf, tissue culture, bean (*Phaseolus*) 8697
 - soil compaction, sugar cane 8212
- Rubus chamaemorus**
- growing, afforestation sites 7511
 - soil, management 7511
- R. spp.**
- fruit, composition 101
 - growing, USSR 4299
 - pests, *Byturus tomentosus*, annual report, UK 1856
 - plant variation 6680
 - pollination 533
 - sterols, extraction 1053
 - triterpenes, extraction 1053
 - as weeds, grapevine 5840
- Rudbeckia**
- breeding and selection 6164
 - mutants, induction 6164
- Rudbeckia flower**
- glycosides, content 5415
 - insect attraction, pigments 5415
- Rudbeckia seed, treatment, mutagens** 6164

Rumania

- Jassy, Institute of Agronomy, Faculty of Horticulture, organization and activities 2
 - quince varieties, comparative studies 7482
- Rumex** spp.
- amino acids, content, water deficiency 3628
 - leaf, organic acids, content 8594
 - nutritional value, amino acids 3628
 - proteins, content, water deficiency 3628
 - soilless culture 4379
 - water relations
 - plant
 - amino acids, content 3628
 - proteins, content 3628
 - as weeds
 - asparagus 5291
 - grapevine 5840
- Ruta graveolens**
- coumarins, biosynthesis, tissue culture 9052
 - growing 8038
 - as an annual crop 4772
 - tissue culture, root, coumarins, biosynthesis 9052
- R. spp.**
- alkaloids 9056
 - biosynthesis 9054
 - chlorophyll
 - content, tissue culture 9053
 - metabolism, tissue culture 9053
 - coumarins 8000, 9051
 - biosynthesis 9055
 - essential oil
 - biosynthesis, tissue culture 9051
 - composition 8037
 - tissue culture, light 9051
 - lignans 8000
 - tissue culture
 - callus
 - chlorophyll
 - content 9053
 - metabolism 9053
 - coumarins, biosynthesis 9051
 - terpenes
 - content 9053
 - metabolism 9053
- Saccharicoccus sacchari**
- East Africa, survey, sugar cane pests 8220
 - parasites, *Anagyrus saccharicola*, sugar cane pests 8242
- Saccharosydne saccharivora**, host-pest relationships, sugar cane pests 8243
- Saccharum spontaneum**, breeding and selection 2465
- S. spp.**, photoperiodism, flowering date 1646
- Sagalassa valida**, oil palm pests 9189
- Sahlbergella singularis**
- cacao pests 3182
 - annual report
 - Ghana 7177
 - Nigeria 4035
 - incidence, cacao pests 2443
 - population studies, cacao pests 9143
- Saintpaulia**
- breeding and selection, mutation induction 1352
 - frost, injury, petiole, ice formation 2935
 - growing
 - media, coal ash 8857
 - as pot plants, production 5390
 - irradiation
 - fast neutrons, mutation induction 1352
 - X-rays, mutation induction 1352
- Saintpaulia diseases**
- Erwinia chrysanthemi* 2939
 - Phytophthora nicotianae* 8878
 - control 7889
 - incidence, annual report, German Federal Republic 8837
- Saintpaulia leaf, petiole, temperature, measurement** 2935
- Saintpaulia nutrition** 1325
- Saintpaulia propagation**
- cuttings
 - leaf
 - petiole length 7887
 - supplementary light 7887
 - treatment, growth substances 7887

- Saintpaulia propagation** *contd.*
cuttings *contd.*
media 8844
- Saintpaulia varieties**
comparative trials 6999, 7888
disease resistance, *Phytophthora nicotianae* 8878
- Saissetia oleae**, mandarin and tangerine
pests 9098
- Salinity**
damage
leaf senescence, bean (*Phaseolus*) 2879, 5244
prevention, anti-transpirants, ornamental trees and shrubs, annual report, Canada 8836
shoot growth, *Acer* spp. 4715
trees and shrubs, roadside 313
turfgrasses, roadside, annual report, Canada 2910
water relations, sugar cane 6439
greenhouse soils, tomato, annual report, USA 1935
resistance, leaf, pigments, berberis 2998
- Salix humboldtiana**
pests
Xylosandrus morigerus
alternative hosts
avocado 8154
coffee 8154
- Salmalia malabarica**
essential oil 1438
flower, composition 1438
- Salsify**, pollen, viability 140
- Salsify root**
anatomy 5917
carbohydrate storage 5917
- Salvia**
dwarfing, growth substances 5390
herbicides, responses 8852
ozone, injury 1322
seedling raising, pots, types compared 5390
sulphur dioxide, injury 1322
weed control 3062, 8852
- Salvia grandiflora**, essential oil 4738
- Salvia growth substances**, dwarfing, Pydanon 5390
- Salvia nutrition**, phosphorus 6133
- Salvia sclarea**
amino acids, biosynthesis, photoperiodism, coloured light 7085
essential oil, content 3037
flower
anatomy 3037
morphology 3037
light
coloured
amino acids, biosynthesis 7085
proteins, biosynthesis 7085
sugars, biosynthesis 7085
nitrates, biosynthesis, red light 7085
photoperiodism
amino acids, biosynthesis 7085
proteins, biosynthesis 7085
sugars, biosynthesis 7085
proteins, biosynthesis, photoperiodism, coloured light 7085
sugars, biosynthesis, photoperiodism, coloured light 7085
- S. spp.**
chlorophyll, content, soil moisture 6269
essential oil
content
seed treatment 3026
soil moisture 6269
flowering date, photoperiodism 1348
growth substances, retardants, Pydanon 2163
photoperiodism
dwarfing 1348
flowering date 1348
plant, composition, seed treatment 3026
pollen, viability 1411
pollination 1411
seed
treatment
fast neutrons 3026
gamma rays 3026
- Sandoricum indicum**, fruit, composition 3294
- Sanguinaria canadensis**, alkaloids 5532
- Sanguisorba spp.**, essential oil, content 7983
- S. spp.**, roadsides, establishment 3888
- Sanninoidea spp.**, control, peach pests, annual report, USA 8319
- Sansevieria growth substances**, translocation, heteroauxin 1320
- Sansevieria leaf**, composition, sapogenins 308
- Sansevieria nutrition**
major elements, plant analysis 1376
minor elements, plant analysis 1376
- Santalum spp.**
diseases
spike disease 7086
sandal spike
control 2329
fungicides 3038
vectors, dodder 6270
- Sap**
analysis, nutritional studies, vegetables, annual report, UK 1934
carbohydrates, content, seasonal variations, apple 8403
rise, rootstock-scion relationships, grapevine 2726
- Sapodilla**
annual report, India 4034
ethylene, fruit, ripening 4045
growing
USA 1531
Venezuela 8119
polyploids, induction 9218
- Sapodilla diseases**
Botryodiplodia theobromae 6427
Pestalotia scirotifaciens 2464
- Sapodilla fruit**
aroma 7171
ripening, growth substances, ethephon 4045
- Sapodilla growth substances**, fruit, ripening, ethephon 4045
- Sapodilla leaf**, glycosides, content 2341
- Sapogenins**, content, *Dioscorea* spp. 1454
- Saponaria spp.**, growth substances, translocation, heteroauxin 1320
- Saponins**
content
disease resistance, ivy 5464
root, pea 7743
plant sources, India 7065
production, tissue culture, *Dioscorea* spp. 6296
- Sapotaceae**, growing, fruit production 5646
- Sappaphis devectora**, resistance, apple pests 44
- Satureia spp.**
essential oil 329
composition 329
soilless culture 5487
weed control 5490
annual report, German Federal Republic 7064
- Sawdust**
media, container-grown plants, annual report, Canada 3370
media constituent, physical properties 7291
mulch, tomato 7779
soil amendment
blueberry 4657, 8497
iris 4657
- Saxifragaceae** 6131
value, aesthetic, functional 6131
- Scambus spp.**, biological control of, *Aegeria myopaeformis* 3409
- Scapanes australis**, coconut pests 2444
- Schinus molle**, pests, review, Bolivia 5671
- Schistocerca obscura**
cabbage pests, annual report, USA 4367
celery pests, annual report, USA 8585
- Schizandra chinensis**
chlorophyll, content, soil pH 8968
growing, USSR 4299
photosynthesis, soil pH 8968
respiration, leaf, soil, pH 8968
soil, pH, leaf metabolism 8968
stomata, movements, soil pH 8968
transpiration, soil pH 8968
- Schizonycha affinis**, sugar cane pests, annual report, South Africa 7230
- Schizotetranychus andropogoni**, sugar cane pests 8233
- Schleicheria trijuga**, lipids, content 2373
- Schlumbergera spp.**
flower bud
initiation
photoperiodism 309
temperature 309
photoperiodism, flower bud, initiation 309
temperature, flower bud, initiation 309
- Sciadophyllum spp.**, propagation, cuttings 2168
- Scindapsus spp.**
annual report, USA 8834
diseases, *Pythium splendens*, vontrol 6204
nutrition
major elements, plant, analysis 1376
minor elements, plant, analysis 1376
plant, composition, major and minor elements 1376
propagation
cuttings
treatment
fungicides
benomyl 6204
Dexon 6204
streptomycin 6204
Terrazole 6204
- Scirpophaga nivella**
sugar cane pests 426
varietal resistance, sugar cane pests 1639
- Scirtothrips aurantii**, citrus pests 4003
- S. signipennis**, banana pests 380
- Sclerospora sacchari**
control, sugar cane diseases 8219
incidence, sugar cane diseases 8219
resistance, sugar cane diseases 5648
- Sclerotinia borealis**, lawns and sports turf, diseases 1371, 6195
- S. bulborum**, soil, fumigation, tulip diseases 2959
- S. cepivorum**, onion diseases, annual report, Irish Republic 1939
- S. cydoniae**
control, quince diseases 8479
medlar diseases 5800
quince diseases 5800
- S. fructicola**
cherry diseases 8475
control, peach diseases 7448, 8305
heat treatment
cherry diseases 6619
peach diseases 6619
incidence, peach diseases 6634
medlar diseases 5800
peach diseases 7450, 8475
annual report, Australia 5693
plum diseases 8475
post-harvest dips
cherry diseases 6619, 7481
nectarine diseases 7481
peach diseases 6619, 7481
plum diseases 7481
quince diseases 5800
- S. fructigena**
aerial spraying, cherry diseases 8438
apricot diseases 2613
fruit storage, apple diseases 5751
fruit sugars, content, apricot diseases 5757
medlar diseases 5800
quince diseases 5800
- S. homoeocarpa**
control, lawns and sports turf, diseases 8918
- Cynodon spp.** diseases, annual report, USA 2152
- lawns and sports turf, diseases, annual report, USA 8834
- S. laxa**
apricot diseases 2614
cherry diseases 2613-2614, 2624
control
apricot diseases 6612
cherry diseases 6612
damage, leaf pigmentation, apricot diseases 5015
medlar diseases 5800
quince diseases 5800
resistance, apricot diseases, annual report, Tunisia 4944
varietal resistance, cherry diseases 6618
- S. matthiolae**, stock diseases 4643

Sclerotinia contd.**S. mespili**

- medlar diseases 5800
- quince diseases 5800

Sclerotinia minor, lettuce diseases 135, 5184, 7633**S. narcissicola**, incidence, narcissus diseases, annual report, UK 2153**Sclerotinia sclerotiorum**

- bean (*Phaseolus*) diseases 644, 1214
- annual report, USA 4367

- brassicas, diseases, annual report, Australia 5882

- chicory diseases, annual report, Irish Republic 1939

control

- bean (*Phaseolus*) diseases 7707
- cabbage diseases 7656

- forecasting, bean (*Phaseolus*) diseases 7707

- incidence, bean (*Phaseolus*) diseases 7707
- lettuce diseases 7633

post-harvest dips

- bean (*Phaseolus*) diseases 8706
- celery diseases 6948

- post-harvest sprays, celery diseases 6948
- soil, fumigation 2206

stock diseases 4643

- varietal resistance, lettuce diseases 4403

S. spp.

- apple diseases, annual report, UK 903

control

- apple diseases 7413
- celeriac diseases, annual report, German Federal Republic 7600

- cherry diseases, annual report, USA 8319

- cucumber and gherkin diseases
- annual report

- German Federal Republic 7598
- Netherlands 1135

- incidence, lettuce diseases 5910

peach diseases**annual report**

- Australia 450
- USA 451, 1706

- plum diseases, annual report, UK 8316
- varietal resistance, cherry diseases 6615

- vegetables, diseases, annual report, German Federal Republic 7598

S. urnula, blueberry diseases, annual report, USA 5077**Sclerotium cepivorum****onion diseases**

- annual report
- Netherlands 6772

- UK 1934, 5885, 5883
- USA 1130

S. rolfsii

- bean (*Phaseolus*) diseases, annual report, USA 4367

control, tomato diseases 8780

- fruit trees and plants, diseases 7318

- incidence, Brazil, bean (*Phaseolus*) diseases 5235

- nursery stock, diseases 7318
- philodendron diseases, annual report, USA 8834

- Scindapsus* spp., diseases, annual report, USA 8834

stative diseases 2937**S. wakkeri**

- iris diseases 3317
- tulip diseases 3317

Scolothrips indica, predator on,

- Eutetranychus orientalis*, citrus 1489

S. indicus, predator on, *Eutetranychus orientalis*, citrus 1488**S. sexmaculatus**, predator on, *Tetranychus pacificus*, peach 81**Scolytus mali**, cherry pests 8440**S. mediterraneus**, host preference 94**Scoparia spp.**

- diseases, mycoplasma 833
- as weeds, coconut 833

Scopolia carniolica

- alkaloids, biosynthesis, growth substances 8002
- chlorophyll, biosynthesis, growth substances 8002

- growth substances
- alkaloids, biosynthesis, GA 8002
- chlorophyll, biosynthesis, GA 8002

Scopolia contd.**S. spp.**

- biosynthesis, tissue culture 2333
- hybrids

- alkaloids 6313, 8039
- chlorogenic acid 8039

- coumarins 8039

- flavonoids 8039

plant

- anatomy 6312
- morphology 6313

- morphology 1455

- plant, anatomy 6312

- tissue culture, alkaloids, biosynthesis, growth substances 2333

- weed control 3062

S. tangutica

- alkaloids, content, plant, age 5533
- plant, variation 5533

Scopariopsis brevicaulis, fungal parasite, *Cydia pomonella*, apple 1768, 8396**Scoring**

- flower, number, apple 966
- shoot, growth, apple 966

Scorzonera

- annual report, Belgium 1131

fungicides**residues****determination**

- benomyl 7609
- thiophanate 7610

- growing, investigations, Belgium 1160
- weed control, review 4415

Scorzonera diseases**control, review** 4415

- cucumber mosaic, incidence, German Democratic Republic 7637

Scorzonera pests, control, review 4415**Scorzonera root****anatomy** 5917

- carbohydrate storage 5917

Scotland, horticulture, economics 12**Scymnus gracilis**, predator on,

- Eutetranychus orientalis*, citrus 1488-1489

Sechium edule, diseases, *Agrobacterium tumefaciens*, incidence, Brazil 8652**Sedges****as weeds**

- pineapple 8172
- rubber 4881

- vegetables 1946

Sedum spp.

- carbon dioxide, fixation, darkness 4674
- darkness, carbon dioxide, fixation 4674

- diseases, *Phoma telephii* 1374

flower

- bud initiation, photoperiodism 8932
- development 8933

- ground cover plants 710

photoperiodism

- flower bud, initiation 8932
- shoot, growth 8932

propagation**cuttings**

- treatment
- ethylene 5456

- growth substances 5456

seed

- development 8933
- germination 8933

- shoot, growth, photoperiodism 8932
- stomata, distribution 5406

weed control 710**Seed**

- carbohydrates, content growth substances, *Ammi* spp. 9019

- chromones, content growth substances, *Ammi* spp. 9019

composition

- amino acids, bean (*Vicia*) 199
- Antholyz* spp. 2943

- Babiana* spp. 2943

growth substances

- cucumber and gherkin 1197
- melon (cantaloup and musk) 1197

- Iridaceae 2943

- Melasmaurela* spp. 2943

- protein, bean (*Phaseolus*) 197
- Tigridia* spp. 2943

development

- Plumbago* spp. 323

Seed contd.**development contd.**

- proteins, biosynthesis, bean (*Vicia*) 2046

dormancy**breaking**

- grapevine 6718
- growth substances, endogenous, hazel 8448

- Vaccinium* spp. 5091

flowering annuals 725

- rose, annual report, Belgium 5386
- winter hardiness, apple 2542

- drying, silica gel, vegetables 1137

- enzyme activity, bean (*Phaseolus*) 192

exudate**composition**

- bean (*Phaseolus*) 189
- cucumber and gherkin 189

- frost, injury, rose 2991

germination

- chamber, oil palm 7208

- cytological changes, pea 656

enzyme activity**onion** 2833

- pea 2062, 2818, 5280, 8723
- ethylene production, lettuce 1977

- glycosides, metabolism, bean (*Vicia*) 2806

growth substances

- avocado 9069

- peach 2637

- review, vegetables 4374

inhibition

- copper, cabbage 6078
- darkness, lettuce 5181

growth substances

- ABA, lettuce 1155

- lettuce 3644, 3647

light

- blue 5180

- Neophila* spp. 3861

- far-red 5180

- Neophila* spp. 3861

- N-phenacetyl amino acids, radish 8637

- nutrients, lettuce 1155

- reversal, light, red, *Nemophila* spp. 3861

- sugars, lettuce 1155

- tomato 1281

- irrigation, lettuce 5185

light

- far-red, lettuce 1976

- interaction, temperature, valerian 3978

- red, lettuce 1976-1977

- Vaccinium* spp. 5091

- mango 840

media

- lettuce 5185

- mango 840

- palms 2415

metabolic processes

- avocado 9069

- Digitalis* spp. 3075

- fruit trees and plants 2523

- pea 215

pelleted seed

- tomato 7774

- vegetables 3623

- phytochrome metabolism, squash 5208

- under plastic, lettuce 5185

- polysome formation, lettuce 5181

proteins

- metabolism, bean (*Phaseolus*) 5239
- radish 8641

- respiration, pea 1227

- ripeness, *Hippophaë* spp. 5481

- seed maturity, *Agathosma* spp. 6234
- seed size

- Chaenomeles* spp. 3001
- cyclamen 6169

- lettuce 3645

- sources, position in pod, cacao, annual report, Nigeria 4035

- sowing, depth, liquorice 1457

- temperature 3646

- carrot 6940

- cyclamen 4652

- Duboisia myoporoides* 6298

- ethylene, lettuce 6788

- ethylene production, lettuce 1977

Seed contd.

- germination contd.
 - temperature contd.
 - leek 5299
 - lettuce 3645, 5185
 - liquorice 1457
 - palms 2415
 - Primula* spp. 2203
 - Vaccinium* spp. 5091
 - valerian 3978
 - vegetables 2093-2094
 - testing
 - equipment 2491
 - media, flowering annuals 725
 - water relations 3646
 - pea 1227, 6860
 - grading, weed seed, identification, vegetables 2736
 - growth substances
 - content
 - peach 5772
 - Protea* spp. 750
 - number per fruit, fruit, size, orange 4808
 - oil
 - biosynthesis 3336
 - rainfall, *Eruca sativa* 8982
 - composition, Iridaceae 2943
 - content growth substances, *Ammi* spp. 9019
 - production
 - bulb treatment, onion 2089
 - carnation 6967
 - coconut 3187
 - cyclamen 2226
 - Festuca rubra* 3896
 - fruit
 - set, petal removal, carnation 5403
 - size, capsicum 6046
 - grasses 3896
 - growth substances
 - carrot 6947
 - cucurbits 5231
 - lettuce 5914
 - gynoeious lines, melon (cantaloup and musk) 2006
 - harvesting
 - time of
 - bean (*Phaseolus*) 5262
 - capsicum 6046
 - carrot 6113
 - Hippophaë* spp. 5481
 - nitrogen nutrition, cucurbits 6816
 - okra 234
 - onion 663
 - phosphorus nutrition, cucurbits 6816
 - planting
 - spacing, watermelon 1186
 - time of, onion, annual report, New Zealand 5152
 - Poa pratensis* 3896
 - pollination
 - bees, vegetables 5899
 - cacao 3180
 - methods compared, lily 2952
 - primula 6156
 - potassium nutrition, cucurbits 6816
 - radish 616
 - rainfall, *Eruca sativa* 8982
 - seed, sowing, date, carrot 692
 - steckling, planting, radish 3671
 - tea 1660
 - tomato 2853
 - vegetables, annual report, Belgium 4363
 - proteins, extraction, almond 3368
 - quality
 - growth substances, carrot 6947
 - standards, vegetables, annual report, Italy 6771
 - vegetables, symposium 4372
 - ripening, enzyme activity, pea 8723
 - size
 - growth substances, carrot 6947
 - harvesting, time of, carrot 6113
 - seedling growth, *Chaenomeles* spp. 3001
 - soaking, injury, bean (*Phaseolus*) 192
 - sorting, air flow, vegetables 4373
 - sowing
 - dates, onion 3763
 - direct
 - pelleted
 - bedding plants 2165

Seed contd.

- sowing contd.
 - direct contd.
 - pelleted contd.
 - vegetables 1943
 - in pots, bedding plants 2165
 - direct v. transplanting
 - brassicas, annual report, UK 3610
 - tomato 7780
 - disease incidence, onion 3763
 - drills
 - annual report, UK 2487
 - cauliflower and broccoli 1162
 - vegetables 1138
 - annual report, Netherlands 1132
 - in foam 4915
 - mechanical
 - equipment
 - lettuce 5908
 - vegetables 6939
 - vegetables 1138
 - methods, lawns and sports turf 3886-3887
 - orientation, bean (*Phaseolus*) 5237
 - programme
 - continuous production
 - vegetables 1163
 - annual report, UK 3610
 - row direction, onion 3763
 - spacing
 - lettuce 5908
 - onion 3763
 - tape
 - annual report, Austria 114
 - lettuce 5908
 - vegetables 1138
- storage
 - bean (*Phaseolus*) 1206
 - enzyme activity, pea 8723
 - mango 840
 - methods compared
 - pea 6860
 - walnut 1042
 - onion, annual report, UK 3612
 - relative humidity, bean (*Phaseolus*) 639
 - temperature
 - bean (*Phaseolus*) 639
 - pea 208
 - viability, flowering annuals 725
- treatment
 - acaricides, squash 630
 - Actinomyces griseoruber* extracts,
 - cabbage 6792
 - bacterial fertilizers, tomato 6074
 - boron, vegetables 6078
 - capsicum fruit extract, vegetables 2093-2094
 - cobalt, tomato 6078
 - colchicine, tetraploids, gerbera 1337
 - cold
 - cold resistance, melon (cantaloup and musk) 7677
 - Vaccinium* spp. 5091
 - water relations, melon (cantaloup and musk) 7677
- copper
 - carrot 6108
 - vegetables 6078
- electromagnetic fields
 - bean (*Phaseolus*) 5226
 - cucumber and gherkin 5226
- ethylene
 - lettuce 6788
 - carbon dioxide presence 1154
- fast neutrons, *Salvia* spp. 3026
- fruit juice, *Vaccinium* spp. 5091
- fungicides
 - benomyl
 - bean (*Phaseolus*) 6847
 - cabbage 4425
 - vegetables 6861
 - cacti 8921
 - captan, pea 5277
 - carboxin + thiram, onion 7751
 - carrot 693
 - chloroneb, pea 7731
 - coffee 3193
 - cucumber and gherkin 5955
 - cumin 3937
 - kocide, cacao 8135
 - onion 6875
 - spinach 6785

Seed contd.

- treatment contd.
 - fungicides contd.
 - thiram, pea 7731
 - TMTD, *Hippophaë* spp. 7957
 - vegetables 3622
 - walnut 1042
 - gamma rays
 - apple 6531
 - cucumber and gherkin 154
 - feijoa 8109
 - lettuce 1965
 - okra, annual report, India 3607
 - onion 8738
 - plant respiration, bean (*Phaseolus*) 3711
 - root formation on cuttings, bean (*Phaseolus*) 3711
 - Salvia* spp. 3026
 - stratification, apple 6531
 - tomato 245-246
 - growth substances
 - abscisic acid, apple 3380
 - cabbage 8616
 - cycloheximide, squash 5208
 - ethephon, lettuce 3647
 - GA
 - citrus 1468
 - Duboisia myoporoides* 6298
 - eggplant 3783
 - pea 4498
 - grapevine 6718
 - IAA
 - eggplant 3783
 - lettuce 3647
 - pea 4498
 - kinetin
 - lettuce 3647
 - pea 4498
 - lettuce 137
 - NAA
 - eggplant 3783
 - lettuce 3647
 - N⁶-benzyladenine, celery 1309
 - okra 7758
 - peach 2637
 - Rauwolfia* spp. 352
 - review, vegetables 4374
 - hardening, melon (cantaloup and musk) 6809
 - heat 1690
 - cabbage 4425
 - hydrochloric acid, peach 507
 - hydrophobic compounds, onion 6025-6026
 - hydroquinone 6899
 - 2-hydroxyethylhydrazine, pea 224
 - hypertonic salt solution, vegetables 6061
 - insecticides
 - bean (*Phaseolus*) 8692
 - chlorfenvinfos, bean (*Phaseolus*) 5252
 - dichlofenthion, bean (*Phaseolus*) 5252
 - radish 4438
 - squash 630
 - watermelon 2002
 - ionizing irradiation
 - fruit
 - ripening, eggplant 2852
 - size, eggplant 2852
 - light
 - far-red
 - lettuce 136, 1976
 - squash 5208
 - red
 - alkaloids, content, *Solanum dulcamara* 7113
 - lettuce 136, 1976, 6788
 - squash 5208
 - ultra-violet, alkaloids, content, medicinal plants 6288
 - white, alkaloids, content, *Solanum dulcamara* 7113
 - manganese, vegetables 6078, 7773
 - methods compared, *Zizyphus mauritiana* 3292
 - methylene blue 6899
 - molybdenum
 - bean (*Phaseolus*) 5242
 - vegetables 6078

- Seed contd.**
 treatment *contd.*
 mutagens
 flower, colour, carnation 268
 fruit composition, tomato 7769
 pea 205
 rudbeckia 6164
 tomato 2857
 nematocides, NemaCur, vegetables 2394
 nutrients
 capsicum 6892
Hippophae spp. 5482
 lettuce 137
Ocimum sanctum leaf extract,
Catharanthus roseus 8011
 orthonitrophenol 6899
 paranitrophenol 6899
 pelleted
 annual report, Austria 114
 bedding plants 2165
 lettuce
 annual report
 Canada 2734
 UK 5153
 onion 6876
 pansy 1353
 tomato 7774
 vegetables 1943, 3623
 potassium iodide, raspberry 5807
 protons, lettuce 1965
Pseudomonas spp., *Colletotrichum*
lagenarium control, melon
 (cantaloup and musk) 5952
Rhizobium leguminosarum, pea 208,
 5271
 running water, grapevine 6718
 scarification, peach 507
 soaking
 cold water
 peach 507
Rosa spp. 4707
 sodium glutamate, *Rhizobium*
leguminosarum, pea 4497, 5271
 sterilization, disease control, carrot
 693
 stratification
 apple 2542, 6531
 citrus 1468
 grapevine 6718
 growth substances, content, *Rosa* spp.
 4707
 metabolic processes, fruit trees and
 plants 2523
 temperature, apple 5713
Vaccinium spp. 5091
 sulphuric acid
 geranium 6981
 liquorice 1457
 temperature, growth substances,
 content, *Rosa* spp. 4707
 ultrasonics, squash 4446
 vernalisation, cauliflower and broccoli
 7644
 vernalization
 flower
 sex
 cucumber and gherkin 1198
 melon (cantaloup and musk)
 1198
 virus, control, bean (*Phaseolus*) diseases
 175
 vitamins, *Rosa* spp. 2990
 wafering, vegetables 6061
 X-rays
 bean (*Phaseolus*) 191
 cucumber and gherkin 154
 flowering, *Catharanthus roseus*
 8010
 liquorice 7109
 pollen sterility, *Catharanthus roseus*
 8010
 seed number per fruit, *Catharanthus*
roseus 8010
 zinc, vegetables 6078
 viability
 harvesting, time of, carrot 6113
 sugars, content, oil palm, annual report,
 Nigeria 9181
 water, absorption, *Rosa* spp. 4706
 water relations, bean (*Phaseolus*) 192
- Seedling**
 development, cotyledon removal, rose
 5478
- Seedling contd.**
 growth
 plumular protection 20
Pseudomonas spp., cucumber and
 gherkin 5212
 seed
 position in fruit, vegetables 6061
 shape, vegetables 6061
 size
Chaenomeles spp. 3001
 pea 1228
 vegetables 6061
 studies, equipment 4916
 identification, leaf, shape, mandarin and
 tangerine 7124
 planting
 mechanical, vegetables 1138
 tools 2077
 pricking out
 root trimming, anthurium 6991
 work studies, tulip 1317
 production
 economics, Hungary, vegetables 6776
 in greenhouses
 plastic, economics, tomato 5339
 types compared 6493
 nutrition, sugar cane, annual report,
 USA 9221
 temperature, annuals 276
 raising
 bare root method, tomato 4557
 carbon dioxide, supplementary,
 vegetables 2880
 containers
 annuals 2218
 types compared, melon (cantaloup
 and musk) 7678
 vegetables 1138
 light
 artificial, lettuce 8604
 supplementary
 tomato 6096
 vegetables 2880
 media, tomato 4557
 methods compared, cabbage 4421
 paper tubes, cauliflower and broccoli,
 annual report, UK 1937
 under plastic
 capsicum 5338
 tomato 5338
 plastic bags, coconut 1558
 pots
 economics, onion 3759
 onion 3759, 6027
 made from plastic films
 tomato 2865
 vegetables 2865
 tomato 4557
 types compared
 endive 5390
 ornamental plants 5390
 soil amendments, plastic foam 8850
 soil blocks
 petunia, annual report, Netherlands
 1314
 tomato 4557
 sex, determination, colorimetric test,
 nutmeg 756
 storage
 plastic bags, cauliflower and broccoli
 7638
 tomato 2863
 transport, containers, plastic, vegetables
 4375
 treatment
Ocimum sanctum leaf extract,
Catharanthus roseus 8011
 paint bands, cacao, annual report,
 Ghana 7177
Segestidea spp., biological control, coconut
 pests 9158
Selenicereus pteranthus, flower, opening-
 closing, rhythms 6201
S. spp., edible fruits 822
Selenothrips rubrocinctus, cacao pests,
 annual report, Nigeria 4035
Semecarpus anacardium, phenolic
 compounds 7119
Sempervivum spp.
 flower, development 8933
 seed
 development 8933
 germination 8933
- Septoria apii**
 post-harvest dips, celery diseases 6948
 post-harvest sprays, celery diseases 6948
S. apii-graveolentis, celery diseases 2143
S. apicola
 celery diseases 2900
 annual report, UK 1934
 control, celery diseases 7822
 pathogenicity, celery diseases 8816
S. lycopersici
 host enzyme activity, tomato diseases
 4575
 resistance, tomato diseases 4575
S. spp.
 fungal parasites, *Puccinia palargonii-*
zonalis, geranium 6982
 gooseberry diseases 2679
Serodes partita
 traps
 light
 apricot pests 4259
 peach pests 4259
Seseli rigidum, coumarins 9057
S. sessiliflorum
 chromones 3975
 coumarins 3975
Setaria lutescens, as weeds, lawns and sports
 turf 8914
S. spp.
 as weeds
 carrot 8809
 vegetables 680
Severinia buxifolia
 alkaloids, content 6331
 leaf, composition 6331
 pests, *Tylenchulus semipenetrans*,
 resistance 3100
 as a rootstock, citrus 6331
 Sewage sludge, vegetables, annual report,
 UK 3613, 8584
 Shade
 anthurium
 nutrition 7877
 plant responses 7877
 apple, plant responses, annual report, UK
 8317
 cacao
 disease incidence
Phytophthora palmivora 9141
Verticillium dahliae 7182
 pest incidence, *Sahlbergella singularis*
 2443
 planting, spacing, annual report, Ghana
 7177
 carnation, flowering 8856
 coffee
 annual report, Sri Lanka 3171
 artificial, annual report, Rhodesia
 4829
 nutrition, leaf, analysis 1570
 pest incidence, *Stephanoderes hampei*
 9162
 pepper, black, disease incidence, *Elsinoë*
piperis 6254
 rubber, weed control 9209
 tea
 disease incidence, *Phomopsis theae*
 5662
 nutrition
 annual report
 Kenya 7264
 Malawi 6454–6455
 Sri Lanka 8262
 weed control, coffee 4858
 Shade trees
 establishment, tea 9271
 grubbing, tea, annual report, India 1657
 Shallot
 amino acids, content, bulb 6035
 annual report, Belgium 4363
 carbohydrates, content, bulb 6035
 fungicides, interaction, herbicides 1258
 herbicides
 injury, DNOC 1258
 interaction, fungicides 1258
 as medicinal plants 6035
 photoperiodism, bulb, ripening 602
 weed control 1258
 Shallot bulb
 heat treatment 1690
 ripening, photoperiodism 602
 Shallot diseases
Botrytis allii, bulb treatment 1258

Shallot diseases *contd.**Pseudomonas syringae* 2083**Shoot**

-root relationships
apple, annual report, UK 3346
growth studies 5676

Shorea robusta

nut
fatty acids 3090
glycerides 3090

Silene spp., as weeds, grapevine 1904**Silicon**

availability, sugar cane, annual report, USA 9221
cane, ripening, sugar cane 9265
deficiency, symptoms, sugar cane 4887
determination
colorimetric
orange 7287
sugar cane 7287
sugar cane 3260
phosphorus metabolism, sugar cane 7252

Silver, toxicity, cucumber and gherkin 157

Sinapis spp., glycosides 8634*Sipha flava*, aerial spraying, sugar cane pests 8235**Sisal**

cytology, sterility 6271
economics, South Africa 5503
growing, South Africa 5503
herbicides
injury
bromacil 7992
diuron 7992
monuron 7992
terbacil 7992
irrigation, plant anatomy 9008
stomata, number, irrigation 9008
weed control 6340, 7992

Sisal plant

anatomy
environmental factors 9008
irrigation 9008

Sisal propagation

bulbils 6271
suckers 6271

Sitona lineatus, pea pests, annual report, UK 3611*S.* spp., bean (*Vicia*) pests, annual report, UK 5153*Skimmia laureola*, leaf, composition 9005**Slugs**

control, metaldehyde 1329
lettuce pests 1971
strawberry pests 107

Small fruits

annual report
Canada 7488
German Federal Republic 5094
book 2666
diseases
annual report, German Federal Republic 6669
Australia 6518
frost, injury, critical temperatures, flower, development 4158
pests
annual report, German Federal Republic 6669
Australia 6518
plant protection, book 2671
storage, pre-cooling, mobile unit 2672
water relations, study technique, phosphorus-32 beta gauge 8518

Snails

black currant pests, annual report, UK 1856
scavenger of, endogenous fungi, apple 1752

Snow

cover
potential water reserve, grapevine 8541
temperature, pruning and training, protected cultivation, lemon 3110

Snowdrop

drought, resistance, leaf, composition 2963
flowering, date, leaf, composition 2963
irradiation
ionizing
injury 737
mutation induction 737

Snowdrop growth substances, endogenous, leaf, translocation 706

Snowdrop leaf

fatty acids
content
drought resistance 2963
flowering, date 2963

Sodium

absorption
fertilizers compared, spinach 5903
growth substances, kinetin, bean (*Phaseolus*) 2027
leaf, tissue culture, bean (*Phaseolus*) 8697
potassium nutrition, pea 5243
content
flower, peach 6631
fruit, peach 6631
nitrogen nutrition, orange 1478
root, soil salinity, pea 8722
determination, atomic absorption spectrophotometry 8290
leaf analysis
banana 9131
citrus 1484
plant, composition, pea 5243
potassium nutrition, tea, annual report, Sri Lanka 8262
toxicity
plant tolerance
irrigation water, vegetables, ornamental plants, fruit trees and plants 5163
pea 3734
translocation
bean (*Phaseolus*) 2028
enzyme activity, root, pumpkin 2778
temperature, bean (*Phaseolus*) 2028
tomato 2126

Soil

aeration 4121
amendments, ornamental plants 709
measurement, annual report, Australia 6480
root, growth, pea 2812
water table, *Vaccinium* spp. 6686
amendments
asphalt, tomato 2114
compared, iris 4657
compost, grapevine 5847
gypsum, grapevine 1106
hydrophobic polystyrene foam, ornamental plants 709
hydrophilic urea-formaldehyde-foam resin, ornamental plants 709
Hygromull 865
mushroom compost, nutrient availability, black currant 6673
peat compost, grapevine 5850
perlite, tomato 2114
plastic foam, ornamental plants 709
polystyrene, nutrient availability, vegetables 117
sawdust
tomato 1285, 2114
weed control, blueberry 8497
urea formaldehyde foam resins, nutrient availability, vegetables 117
vermiculite, tomato 2114
water-soluble polymers, ornamental plants 709
wood chips, grapevine 1106
compaction
disease incidence, bean (*Phaseolus*) 181, 5241
root, growth, pea 2053-2054
seedling, emergence, vegetables 5238
sugar cane 411
conservation
amendments, lawns and sports turf 2969
cover crops
coffee 3161, 5618
tea 8269
mulching, tea 8269
tea 9270
cultivation
depth, sugar cane 9230
machines
fruit trees and plants 2511
grapevine 1908
methods compared, grapevine 5115

Soil *contd.*

erosion
coffee 3161, 5618
control
fruit trees and plants 3310
Pennisetum clandestinum 739
tree fruits 8325
tropics
Stenotaphrum dimidiatum 300
tea 8269
direct sown seed, celery 5377
herbicide-contaminated soil, grapevine 6733
tea 9270
fumigation
carbathion, *Meloidogyne* spp., vegetables 8783
carbon disulphide
manganese, content, leaf, avocado 8055
phosphorus absorption, avocado 8055
chloropiricin
apple, annual report, UK 8318
Armillaria mellea, grapevine 7573
cucumber and gherkin 1191
Fusarium oxysporum, f. *lycopersici*, tomato 7795
injury, avocado 8055
manganese, content, leaf, avocado 8055
Meloidogyne incognita, grapevine 7573
nematode control, tree fruits 5728
phosphorus absorption, avocado 8055
Phytophthora spp., raspberry 5087
soil sickness, tree fruits 8381
Xiphinema index, grapevine 7573
chloropiricin-methyl bromide mixture, *Verticillium dahliae*, strawberry 3325
DBCP
nematode control, cabbage 5927
Phytophthora spp., raspberry 5087
DD
injury, avocado 8055
manganese, content, leaf, avocado 8055
Meloidogyne javanica, passion fruit 7168
nematode control
cabbage 5927
tree fruits 5728
phosphorus absorption, avocado 8055
Phytophthora citrophthora, citrus 4787
P. parasitica, citrus 4787
P. spp., raspberry 5087
Pratylenchus vulnus, peach 1021
Tylenchulus semipenetrans, citrus 4787
DD-MENCS, *Fusarium oxysporum*, f. *lycopersici*, tomato 4570
Di-Trapex
disease control, bedding plants 2206
temperature, annual report, Netherlands 4604
Ditraxex
nematode control, tree fruits 5728
root growth, tree fruits 5728
Verticillium dahliae, strawberry 3325
1,3-D
Armillaria mellea, grapevine 7573
Meloidogyne incognita, grapevine 7573
Phytophthora spp., raspberry 5087
Xiphinema index, grapevine 5133, 7573
EDB, *Meloidogyne javanica*, passion fruit 7168
ethylene dibromide
injury, avocado 8055
phosphorus absorption, avocado 8055
methyl bromide
Armillaria mellea, grapevine 7573
bromine
content
fruit, tomato 8789
leaf, tomato 8789

Subject Index

- Soil contd.**
 fumigation contd.
 methyl bromide contd.
 cucumber and gherkin 1191
 annual report, Belgium 5148
 disease control
 bedding plants 2206
 vegetables 8651
Fusarium oxysporum, f. *lycopersici*, tomato 7795
Heterodora rostochiensis, tomato 6089
 injury
 carnation 5394, 6139
 rose 5394
Meloidogyne incognita, grapevine 7573
M. javanica, passion fruit 7168
 methods compared, citrus 6348
Peronospora anemones, anemone 2221
Phytophthora spp., raspberry 5087
 plant composition, bromine, vegetables 1953
 residues
 ornamental plants 5394
 parsley, annual report, German Federal Republic 7070
 plant, lettuce 2755
 soil, lettuce 2755
 vegetables 1953
 seedling growth, citrus 7132
Xiphinema index, grapevine 5133, 7573
 methyl isothiocyanate, *Peronospora anemones*, anemone 2221
 nematodes, nurseries, tea 431
Phomopsis sclerotoides, cucumber and gherkin 1191
 propargyl bromide, *Phytophthora* spp., raspberry 5087
 propylene oxide, phosphorus absorption, avocado 8055
 thiazole, *Meloidogyne* spp., vegetables 7801
 Vapam
Botrytis tulipae, tulip 2959
Peronospora anemones, anemone 2221
Sclerotinia bulborum, tulip 2959
 various
 nematode control, tree fruits, annual report, Rhodesia 4149
 pre-planting, apple, annual report, UK 8317
 vegetables, annual report, Netherlands 1135
 Vorlex
 annual report, USA 4368
 injury, strawberry 8514
 fungistasis 3316
 heating
 chicory, annual report, Belgium 5906
 flower, quality, carnation 5402
 lawns and sports turf 7920
 systems, lawns and sports turf 3889
 vegetables, annual report, Netherlands 1135
 micro-organisms
 amendments, *Verticillium dahliae*, strawberry soil 110
 azalea, annual report, Belgium 5386
 control, root exudate, onion, *Verticillium dahliae* 2085
 fungicides, apple 8391
 monoculture, capsicum 237
 replanting, apple 467, 6570
 rhizosphere, radish 618
 rhizosphere, radish 617
 seedling, growth, citrus 7132
 moisture
 bulbs, annual report, Netherlands 2219
 chlorosis, apple 8382
 conservation, asphalt barriers, sugar cane 410
 content
 root nodule, nitrogen-fixing activity, bean (*Vicia*) 2040
 trees and shrubs, suitability 2274
 flower, size, *Zantedeschia* spp. 2950
 flowering, mandarin and tangerine 8070
- Soil contd.**
 moisture contd.
 fruit quality, mandarin and tangerine 8070
 intercropping, apple 2560
 nutrient absorption, turnip 5926
 oxygen concentration
 plant amino acids, content, disease incidence, orange 2393
 plant composition, citrus 2383
 root, growth, pea 2812
 pH
 alkaline 3299
 leaf, composition, apple 1743
 limestone, sources compared, citrus 3996
 measurement, automatic, vegetables, annual report, UK 1934
 trees and shrubs, suitability 2274
 potting
 temperature
 seed, germination, tomato 678
 seedling growth, tomato 678
 salinity
 amino acids, biosynthesis, pea 2815
 chlorine, ornamental plants, ground cover plants 2161
 damage, calcium nutrition celosia 727
 enzyme activity, pea 2815
 iron, absorption, vegetables 6912
 leaf, composition, apple 1743
 manganese, absorption, vegetables 6912
 organic acids, metabolism, leaf senescence, mesembryanthemum 2941
 peach 5765
 plant salt translocation 1673
 plant tolerance
 carrot 8812
 grapevine 8554
 ground cover plants 2161
 ornamental plants 2161
 pea 3734
 vegetables 2740
 sodium, ornamental plants, ground cover plants 2161
 sodium chloride, pea 210
 sodium sulphate, pea 210
 tolerance, peach 509
 zinc, absorption, vegetables 6912
 sampling, methods, microvolumes 9
 sickness, steaming, temperature, apple 6561-6562
 steaming
 frequency, ammonium toxicity, chrysanthemum 1325
 manganese nutrition, melon (cantaloup and musk) 1998
 vegetables, annual report, Netherlands 1135
 sterilization
 chemicals, virus control, peach 1824
 equipment, mobile grid 2488
 methyl bromide, greenhouse crops, annual report, UK 5884
 steam
 disease control
 cyclamen 3866
 tomato 7795
 vegetables 8651
 leaf, composition, tomato 240
 virus control, peach 1824
 temperature
 citrus, annual report, Australia 9074
 containers, holly 6214
 frost injury
 apple 2554
 cherry 2554
 strawberry 2554
 irrigation, banana 4037
 measurement 4127
 mulching
 chicory 5176
 holly 6214
 tea 3266
 nutrient absorption, pineapple, report, USA 6382
 plant nutrition, vegetables 6826
 root damage, apple 2553
 root development, trees and shrubs 3925
 root growth, trees and shrubs 3925
- Soil contd.**
 uniformity restoration, post-experiment, orange 3994
 water table, *Vaccinium* spp. 6686
 waterlogging, disorder incidence, coconut 9152
 Soilless culture
Asparagus sprengeri 306
 capsicum, annual report, Israel 3608
 citrus, annual report, Australia 1466
 container volume, tomato 682
 equipment 1676-1677
 forcing, chicory 5177
 iron, sources, vegetables 2845
 media
 anthurium 8875
 capsicum 236
 lettuce, annual report, Netherlands 1132
 melon (cantaloup and musk) 6815
 sawdust, tomato 1285
 nitrogen, grapevine 5852
 nutrient solution
 addition
 algae, *Anabaena cylindrica*, strawberry 2701
 humates, tomato 8774
 concentration
 bean (*Phaseolus*) 5979
 carnation 5401
 grapevine 6749
 tomato 682
 vegetables 5215
 melon (cantaloup and musk) 6815
 mineral fertilizers, vegetables 6075
 rose 2298
 salinity
 squash 6912
 tomato 6912
 nutritional studies
 anthurium 8875
 blueberry 4319
 coffee 6405
 equipment, grapevine 5121
 olive 4027
 Soxhlet glassware technique 4921
 plant anatomy, carrot 6938
 propagation, hop 5504
 spice plants 5487
 vegetables, annual report, France 3605
Solanaceae, chromosome numbers 1319
Solanaceae
 fruit species, American tropics 9123
 growing, American tropics 9123
 nomenclature 9123
 value 9123
Solanum aviculare, form variation 5534
S. dulcamara
 alkaloids 7114
 biosynthesis 7114
 content
 irrigation 8040
 seed treatment 7113
 amino acids, content, irrigation 8040
 irrigation
 alkaloids, content 8040
 amino acids, content 8040
 pollen structure 5535
 seed
 treatment
 light
 red, alkaloids, content 7113
 white, alkaloids, content 7113
S. eryanthum, alkaloids 8041
S. incanum, alkaloids, content 6314
S. khasianum
 diseases, mosaic 3086
 mutants
 alkaloids 9059
 curved spines 9059
 induction, irradiation, gamma rays 9059
 as virus indicator plants 3966
S. laciniatum
 alkaloids
 content
 fruit, seasonal variations 8042
 leaf, seasonal variations 8043
 carbohydrates
 content
 fruit, seasonal variations 8042
 leaf, seasonal variations 8043
 climate 6315

- Solanum laciniatum* contd.**
form variation 5534
irrigation 6315
pests, *Agrotis segetum* 5536
soil, types 6315
- S. nigrum***
growing 7823
as weeds, bean (*Phaseolus*) 7702
- S. pseudocarpum***, steroids, content, fruit 9058
- S. spp.***
as a rootstock, eggplant 4545
as weeds
bean (*Phaseolus*) 2017
essential oil plants 2495
fruit trees and plants 2495
onion 5305
vetiver 2495
- S. torvum***
diseases, *Colletotrichum* spp., eggplant 6051
as a rootstock, eggplant 4545, 5329
- S. xanthocarpum***
alkaloids 4773
coumarins 4773
glycosides 4773
steroids 4774
- Solar radiation**
herbicides
absorption, pea 5283
translocation, pea 5283
reflection, apple 2557
- Solidago virga-aurea***, essential oil, content 7983
- Sonchus oleraceus***, as weeds, lettuce 7631
- Sophora angustifolia***, flavonoids 6245
- S. japonica***, varieties 3906
- Sorbus aucuparia***
fruit
composition 2665
yield, forecasting 1045
- S. spp.***
fluorine, toxicity, plant tolerance 7845
growth, habit, annual report, German Federal Republic 7844
rootstocks, annual report, Netherlands 4604
sulphur dioxide, injury, plant resistance 7845
as windbreaks 4294
- Sorghum halepense***
as weeds
grapevine 6729
orange 8066
sugar cane 8205, 9237-9239
tomato 7775
- S. spp.***
as weeds
citrus 6338
peach 4252
- S. vulgare***, as a cover crop, peach 7452
- South Africa**
chicory, growing, economics 5640
pineapple, growing, economics 5640
sisal
economics 5503
growing 5503
- Sparganthis pilleriana***, control, cultural methods, tea pests 3279
- Spartium junceum***, essential oil, content 7983
- Spathiphyllum* spp.**, diseases, dasheen mosaic 2975
- Spermopora subulata***, lawns and sports turf, diseases, annual report, Canada 3882
- Sphecoloma necator***, incidence, raspberry diseases, annual report, German Federal Republic 6669
- S. persea***, avocado diseases, annual report, USA 2375
- Sphaerotheca fuliginea***
control, cucumber and gherkin diseases 6822, 7388, 8482
cucumber and gherkin diseases 160, 3319, 3685, 5954
annual report, Belgium 8578
marrow diseases 6821
melon (cantaloup and musk) diseases 5221
okra diseases 160
seed treatment
cucumber and gherkin diseases 5955
pumpkin diseases 6861
- Sphaerotheca fuliginea* contd.**
varietal resistance
cucumber and gherkin diseases 1183, 7673
strawberry diseases 8504
- S. humuli***
annual report, German Federal Republic 7087
control, hop diseases 6278
hop diseases 4748
host-parasite relationships, hop diseases, annual report, UK 3954
Kalanchoe spp. diseases 3904
Lagenaria spp., diseases 6823
Luffa spp., diseases 6823
resistance, breeding and selection, hop diseases, annual report, UK 3954
strawberry diseases 3550
annual report, Canada 2669
- S. macularis***
protected cultivation, strawberry diseases 1878
resistance, strawberry, annual report, UK 1856
small fruits, diseases, annual report, Irish Republic 1857
strawberry diseases 1072, 4324
- Sphaerotheca mors-uvae***
black currant diseases 3520, 5731, 6674
annual report
German Federal Republic 6669
UK 1856, 3514, 7489
control
black currant diseases 7499
annual report, German Federal Republic 8481
gooseberry diseases 5731
resistance
black currant diseases 6675
breeding and selection, black currant diseases 7492
small fruits, diseases, annual report, UK 3515
varietal resistance, black currant diseases 6676
- Sphaerotheca pannosa***
control, rose diseases 5476, 7848
host morphology, peach diseases 8458
f. *rosae*, rose diseases, annual report, UK 6128
rose diseases 6229
annual report
Denmark 3298
UK 8838
varietal resistance, rose diseases 4709, 8950
- S. spp.***
control 8305
peach diseases 513
rose diseases
annual report
Netherlands 6127
UK 4606
strawberry diseases, annual report, Belgium 1060
varietal resistance, rose diseases 5473
- Sphenophorus venatis vestita***, *Zoysia* spp., pests 4672
- Spice plants**
amino acids, content 449
bibliography 7067
essential oil 8973
Italy 6244
products and by-products 8973
review 8973
root, anatomy 3172
seed, oil, biosynthesis 3336
- Spilocaea eriobotryae***, loquat diseases 815
- Spilonota ocellana***, population studies, apple pests 956
- Spinach**
amino acids, content, water deficiency 3628
annual report
Belgium 4363
UK 1938
ascorbic acid
content
light, intensity 607
nitrogen nutrition 2903
bolting 127
chlorophyll, metabolism, enzyme activity 4396
- Spinach contd.**
chloroplast
number
light 4394
temperature 4394
size, temperature 4394
enzyme activity
leaf
determination 5897
light 4396
plant sex affects 129
trace elements 2747
enzymes
extraction 8593
leaf 1959, 4395, 5895
growth chambers
leaf production 8617
plant composition 8617
harvesting, mechanical, planting, spacing 4391
herbicides
injury
cycloate 7618
phenmedipham 7618
pyrazone 7618
insecticides
residues
arsenic 3329
plant, Perthane 2500
vamidothion 4393
iron, determination, ferrozine 3303
lead, residues 4936
light
chloroplast, number 4394
intensity
ascorbic acid, content 607
leaf, number 607
plant composition 2903
nitrogen, metabolism 2748
nitrates
content
nitrogen nutrition 2746
temperature 2746
determination, spectrophotometric 7619
nitrite, toxicity 5893
nutritional value, amino acids 3628
photoperiodism
enzyme activity 129
nitrate accumulation 1144
planting, spacing 4391
proteins
content, water deficiency 3628
metabolism, trace elements 2747
nutrients, content, herbicides 4485
soilless culture 4379
sterols, content 8595
temperature
chloroplast
number 4394
size 4394
nitrate accumulation 2746
tissue culture
chloroplasts 128
leaf, chloroplast, number 4394
vitamins, content, nitrogen nutrition 865
water relations
plant
amino acids, content 3628
proteins, content 3628
weed control 7617-7618, 8588
annual report
Canada 2734
New Zealand 5152
Avena spp., annual report, German Federal Republic 7598
winter hardness, sugars, content 7662
- Spinach beet**
growing, peat, nutrition 5904
insecticides, residues, plant, lead arsenate 1951
light, nitrogen, metabolism 2748
mulching, plastic 4378
nutritional value, vitamins 8596
photosynthesis, soil moisture 6092
- Spinach beet leaf**
biochemistry 5174
nitrogen, metabolism, light 2748
- Spinach beet nutrition**
fertilizers
liquid 5904
slow-release 5904
nitrogen, sources, compared 5904

- Spinach beet soil, cultivation** 4378
Spinach beet varieties, India 8596
Spinach diseases
Cladosporium spp., seed-borne 6785
 cucumber mosaic 3629
Penicillium spp., seed-borne 6785
Peronospora farinosa
 annual report, German Federal Republic 7599
 host-pathogen relationships 1958
Phyllosticta spinacea, varietal resistance 7616
Phytophthora cryptogea, annual report, German Federal Republic 7599
Verticillium dahliae, seed-borne 6785
Spinach leaf
 composition 3675
 nitrates, content 1957
 nitrogen, metabolism, light 2748
Spinach Leaf, number, light, intensity 607
Spinach leaf
 organic acids, content 8594
 stomata, size, tetraploid plants 125
 sugars, content, seasonal variations 7662
Spinach nutrition
 boron 126
 calcium 126
 absorption, fertilizers compared 5903
 fertilizers, organic and inorganic compared 5903
 iron, absorption, fertilizers compared 5903
 magnesium 126
 manganese 126
 nitrogen 126, 1950, 2903, 4391
 nitrate accumulation 1957, 2746
 photoperiodism 1144
 sex expression 127
 sources, compared 119
 trace elements, content 865
 vitamins, content 865
 phosphorus 126, 2739
 absorption, fertilizers compared 5903
 potassium 126, 2739
 chloroplast activity 128
 sodium, absorption, fertilizers compared 5903
Spinach plant
 composition
 calcium nutrition 126
 magnesium nutrition 126
 nitrogen nutrition 126, 2903
 organic compounds, nitrogen, sources 119
 potassium nutrition 126
 sex, enzyme activity 129
Spinach seed
 treatment
 annual report, German Federal Republic 7597
 fungicides 3622, 6785
Spinach varieties 4391
 disease resistance, *Phyllosticta spinacea* 7616
 ozone, injury, resistance 4392
 USSR 1942
Spinacia spp., root, cation exchange capacity 4144
Spiraea, pollen, germination, boron nutrition 3000
Spiraea growth substances, retardants, chlormequat 6212
Spiraea nutrition, boron, pollen germination 3000
Spodoptera eridania, tomato pests, annual report, USA 8585
S. exiqua, tomato pests, annual report, USA 8585
S. frugiperda, biological control, cabbage pests 4427
S. littoralis, control, artichoke, globe, pests 5905
S. mauritia, lawns and sports turf, pests 5451
Spray, testing, equipment 8
Spraying
 aerial
 coffee 3206
 cucumber and gherkin 1195
 general, deposits, tea 4111
 insecticides, sugar cane 4893
 tomato 2876
Spraying contd.
 equipment
 annual report, UK 2487
 atomizers 4933
 duster, grapevine 5135
 hop 3045
 hydraulic sprayer, coffee 4058
 low-volume, grapevine 5136
 mist blower, grapevine 5135
 performance 891
 rubber 8185
 tree trunk spray boom 3338
 types compared, citrus 3137
 low volume
 apple, annual report, German Federal Republic 7309
 fruit trees and plants, annual report, Belgium 4942
 materials, foliar absorption, review 6498
 methods compared
 grapevine 1917
 hop 5512
 precipitants, residues, orange 9086
 programmes, apple 7371
 review 2504
 stickers, types compared 4929
 ULV and high volume compared, apple 473
Squash
 annual report
 Italy 6771
 USA 600, 4368
 chlorophyll, degradation, pumpkin mosaic virus 1259
 cytology 1990
 enzyme activity
 leaf 7691
 seed, germination 5964
 varietal differences 164
 growing, Hungary 7672
 growth chambers, environmental studies 6825
 herbicides, injury, naptalam 624
 phloem, cytology 7688
 planting, spacing, annual report, Rhodesia 4364
 proteins
 distribution, phloem cells 7688
 structure, seed 8642
 soilless culture, nutrient solution, salinity 6912
 sugars, metabolism 3686
 temperature, leaf, environmental factors 6825
 translocation, anaerobic conditions 8658
 as virus indicator plants 3473
 weed control 623–624
Squash diseases
 bean yellow mosaic
 symptoms 7684
 varietal resistance 7684
Erysiphe cichoracearum 6819
Pseudoperonospora cubensis, annual report, USA 8585
 pumpkin mosaic virus, chlorophyll, degradation 1259
Squash flower
 bud initiation
 growth substances
 ethephon 1201
 NAA 1201
 development 2007
 opening, mechanism 2007
 sex
 growth substances
 ethephon 1201
 NAA 1201
Squash fruit
 number, seed treatment, ultrasonics 4446
 size, seed treatment, ultrasonics 4446
Squash growth substances
 endogenous, flower, IAA 2007
 flower
 sex
 ethephon 1201
 NAA 1201
Squash leaf, temperature, environmental factors 6825
Squash nutrition
 iron, absorption, soil salinity 6912
 manganese, absorption, soil salinity 6912
 zinc, absorption, soil salinity 6912
Squash pests
Acalymma vittatum, host preference 2772
Aphis gossypii, seed, treatment 630
Bemisia tabaci, seed, treatment 630
Diabrotica undecimpunctata, host preference 2772
Diaphania nitidalis, host preference 2772
Meloidogyne spp., annual report, USA 1935
Tetranychus arabis, seed, treatment 630
T. cinnabarinus, seed, treatment 630
Thrips tabaci, seed, treatment 630
Squash root, cation exchange capacity 4144
Squash rootstocks
 melon (cantaloup and musk) 5960
 -scion relationships
 cell sap, composition, movement 5960
 water relations 5960
Squash seed
 germination
 enzyme activity 5964
 phytochrome metabolism 5208
 proteins 8642
 treatment
 acaricides 630
 growth substances, cycloheximide 5208
 insecticides 630
 light, red and far red 5208
 ultrasonics 4446
Squash soil
 micro-organisms 2774
 salinity
 iron, absorption 6912
 manganese, absorption 6912
 zinc, absorption 6912
Squash varieties 4371
 disease resistance, bean yellow mosaic 7684
 Pusa Alankar 6808
Sri Lanka, oil palm, growing 9183
Stachyidium theobromae, banana diseases 1541
Staking
Lannea grandis trees, grapevine 6744
 methods compared, grapevine 6744
 trees and shrubs 2979
 wire mesh cages, tomato 2868
Staphylea spp., pollen, germination, boron nutrition 3000
S. spp. nutrition, boron, pollen germination 3000
Statice
 annual report
 Canada 2910
 USA 1441, 6129, 8834
 growing, under cloth-shaded structures 8860
 herbicides, responses 8852
 pollen, studies 6988
 temperature
 flower bud, initiation 2940
 growth 2940
 weed control 8852
Statice diseases
Colletotrichum spp. 6163
Sclerotium rolfsii 2937
 turnip mosaic 2936
Statice flower
 anthocyanins, content 8877
 biology 6988
 bud initiation, temperature 2940
 colour 8877
 flavonoids, content 8877
 pigments, content 8877
Statice pests, aphids, virus vectors, turnip mosaic 2936
Statistical analysis
 Boundary Line, crop yields 1678
 disease assessment 4126
 methods 8287
 design of trials 3301
 cacao 9137
 gerbera 724
 grapevine 2706
 growth chambers 4129
 mandarin and tangerine 361
 plot size, bean (*Phaseolus*) 7695
 sugar cane 8190

Statistical contd.

- sampling
 - bean, coffee 8146
 - fruit
 - apple 7330
 - coffee 8146
 - leaf
 - banana 9131
 - coffee 8146
 - root, lawns and sports turf 3883
 - shoot, coffee 8146
- science, agricultural, book 3295
- technique, leaf, size, measurement, legumes 7
- techniques
 - disease assessment 4126
 - growth studies, apple 8371
 - mathematical model, disorder development, apple 6595
 - photographic surveys, annual report, USA 790
 - yield, estimation, cacao 1547
- Statistics
 - horticultural
 - Department of Agriculture and Fisheries for Scotland 2485
 - FAO 1672
- Stellaria media*
 - as weeds
 - strawberry 8509-8510
 - sugar cane 8204
 - vegetables 7648
- Stellaria* spp.
 - as weeds
 - cabbage 1981, 6795
 - grapevine 1904, 6730
- Stemphylium allii*, fungicidal properties, cauliflower and broccoli diseases 1170
- S. botryosum*
 - carrot diseases 2139
 - fruit storage, tomato diseases 6936
- S. consortiale*, fruit storage, tomato diseases 6936
- S. radicinum*
 - carrot diseases, annual report, UK 1934
 - varietal resistance, carrot diseases 4588
- S. solani*
 - capsicum diseases 6043
 - tomato diseases 1288
 - annual report, USA 4368
- Stenotarsonemus pallidus*, strawberry pests, annual report, Belgium 1060
- Stenocranophilus quadratus*, parasite of, *Saccharosydne saccharivora*, sugar cane 8243
- Stenoma catenifer*, varietal resistance, avocado pests 8052
- Stenotaphrum dimidiatum*, lawns, soil, erosion, control, tropics 300
- S. secundatum*, diseases, *Cercospora fusimaculans* 7023
- S. secundatum*
 - breeding and selection, disease resistance, decline 2970
 - diseases
 - decline, varietal resistance 2970
 - downy mildew 2972
 - Puccinia stenotaphri* 6197
 - nutrition
 - fertilizers, application, time, cold resistance 2179, 5448
 - nitrogen, grass colour 2179, 5448
 - winter hardiness 2179, 5448
- Stephanitis typicus*
 - control, coconut pests 9159
 - vectors, root (wilt), coconut pests 6402
- Stephanoderes hampei*
 - coffee pests, annual report, Nigeria 4035
 - shade, coffee pests 9162
- Stephanotis* spp., growing, in pots, annual report, Netherlands 6127
- Sterculia* spp., planting, WANE system, roadside plants 3908
- Stereum purpureum*
 - apple diseases 8392
 - biological control
 - plum diseases 8476
 - Trichoderma viride*, plum diseases 6659
 - incidence, peach diseases 7451
 - rootstock resistance, apple diseases 8345
 - varietal resistance, plum diseases 93

Stereum contd.

- S. rugosum*, chestnut (*Castanea*) diseases 1006
- Sternbergia lutea*
 - chlorophyll, content, plant development 6190
 - pigments, content, plant development 6190
- Steroids, content, fruit, *Solanum pseudomelum* 9058
- Sterols
 - content
 - seed, stone fruits 8424
 - spinach 8595
 - extraction, *Rubus* spp. 1053
- Stethorus punctum*, predator on, *Panonychus ulmi*, apple 4213
- Stigmella malella*, apple pests 1760, 4217
- Stigmima carpophila*, peach diseases, annual report, USA 451, 1706
- Stock
 - anthocyanins, determination 6997
 - genetics, flower, colour 285
 - growing, straw bales 1142
- Stock diseases
 - Pythium aphanidermatum*, magnesium nutrition 2205, 5412
 - Sclerotinia matthiolae* 4643
 - S. sclerotiorum* 4643
- Stock growth substances
 - flower stem
 - length
 - chlormequat 6987
 - GA 6987
 - flowering, date, GA 6987
 - growth reduction, chlormequat 6987
- Stock nutrition, magnesium, disease incidence 2205, 5412
- Stock seed, sowing, peat 7606
- Stomata
 - development 5494
 - distribution
 - geranium 5406
 - Sedum* spp. 5406
 - guard cells
 - cytology
 - bean (*Vicia*) 6856, 8736
 - leek 8736
 - organic acids, biosynthesis, bean (*Vicia*) 3724
 - water relations, bean (*Vicia*) 6856, 8711
 - mechanism
 - bean (*Phaseolus*) 194
 - onion, leaf 1250
 - rose 194
 - verbascum leaf 354
 - movements
 - disease infection, *Pseudoperonospora humuli*, hop 5510
 - light, bean (*Vicia*) 5265
 - oxygen, geranium 2193
 - potassium, bean (*Vicia*) 5265
 - rainfall, tea 8264
 - relative humidity, apricot 8426
 - rubidium, bean (*Vicia*) 7727
 - soil pH, *Schizandra chinensis* 8968
 - sulphur dioxide, bean (*Vicia*) 2039
 - temperature
 - apricot 8426
 - geranium 2192
 - water relations, oil palm, annual report, Nigeria 9181
 - watermelon 8657
 - number
 - drought resistance, peach 7444
 - irrigation, sisal 9008
 - light, intensity, bean (*Phaseolus*) 3715
 - taxonomy, lily-of-the-valley 6188
 - varietal differences, grapevine 6715
 - physiological studies, *Tradescantia* spp., annual report, Australia 6480
 - potassium, accumulation, bean (*Vicia*) 5998
 - size
 - drought resistance, peach 7444
 - tetraploid plants, spinach 125
 - structure 5494
 - grapevine 8573
 - orange 5571
 - water absorption, fruit, cracking, cherry 3445

Stone fruits

- breeding and selection, embryo culture 7313
- diseases
 - Clasterosporium carpophilum* 5699
 - Agrobacterium radiobacter*, var. *tumefaciens*, report, Australia 3344
 - Australia 6518
 - Bacillus mesentericus* 6609
 - chlorotic-necrotic ring spot, control, cross protection 3359
 - chlorotic ring spot, control, cross protection 3359
 - Fusicladium carpophilum* 7328
 - necrotic ring spot, control, cross protection 3359
 - plum pox, annual report, German Federal Republic 7309
 - ring mosaic, control, cross protection 3359
 - Xanthomonas pruni* 6609
- economics, Netherlands 4150
- frost
 - injury
 - critical temperatures 4159
 - flower, development 4158
- fungicides, respiration, leaf bud, Selinon 4951
- growing
 - Argentina 1707
 - Hungary 4946
 - pests, Australia 6518
 - propagation, cutting, rooting capacity 905
 - respiration, plant, fungicides 4951
- rootstocks
 - France 27
 - Prunus* spp. 8321
 - India 2525
 - South Africa 8322
 - tissue culture, embryo 7313
 - weed control 452
- Storage
 - buildings
 - cold
 - floor construction 8311
 - vegetables 1955, 4386
 - controlled atmosphere
 - automatic control 896
 - cold store conversion 895
 - gas proofing, apple, annual report, UK 3371
 - pome fruits 483
 - small unit, apple 8414
 - humidity
 - control, solar energy, coffee 2453
 - measurement 894
 - onion 2835
 - pre-cooling, citrus 1503, 1503
 - temperature, measurement 894
 - ventilation, control, solar energy, coffee 2453
 - coatings
 - plastic
 - apple 983-984
 - pear 1035
 - wax, papaw 8171
 - cold
 - ascorbic acid, content, vegetables 3670
 - chilling injury
 - capsicum 6048
 - enzyme activity, capsicum 6047
 - disease incidence
 - apple 2598
 - fig 1010
 - disorder incidence
 - apple 1800-1801, 2598, 5005
 - pear 1800
 - electricity consumption, fruit, annual report, German Federal Republic 7310
 - fruit
 - enzyme activity
 - apple 6592, 7412
 - pear 4284
 - herbaceous plants, annual report, Netherlands 4604
 - hypobaric, grapefruit 8098
 - organic acids, content, capsicum 4543
 - plants
 - carbohydrates, metabolism, rhubarb 7759
 - nitrogen, content, grapevine 5830

Storage contd.

cold contd.

plants contd.

- strawberry 7527
 - annual report, Netherlands 6670
- relative humidity, disorder incidence, disease incidence, apple 4224
- rootstocks, rose, annual report, Netherlands 4604
- seed, composition, apple 5712
- seedlings, cauliflower and broccoli 7638
- temperature
 - disorder incidence, disease incidence, apple 4224
 - mandarin and tangerine 7153
- varietal behaviour
 - apple 8413
 - pear 8471
- vegetables 4386
- containers
 - apple 8415
 - cooling rate, vegetables 4385
 - liners, grapevine 3599
 - pliofilm, chilling injury, prevention, grapefruit 8098
 - polystyrene, economics, apple 980
 - trays, liners, pear 1033
- controlled atmosphere
 - carbon dioxide, apple 981
 - carbon dioxide concentration, natsudaikai 7154
 - carbon dioxide injury, lettuce 6790
 - chilling injury
 - apple 1798
 - prevention, grapefruit 8098
 - disease incidence
 - apple 985, 2598
 - carrot 695
 - strawberry 7542
 - disorder incidence, apple 1801, 2598, 4225
 - ethylene removal, apple 981
 - fruit
 - acidity, apricot 2615
 - colour, apple 2597
 - composition
 - apple 985
 - banana 1544
 - citrus 9104
 - pear 1035
 - strawberry 3558
 - enzyme activity
 - apple 6592, 7412
 - citrus 9104
 - firmness, apple 2597
 - flavour
 - apricot 2615
 - citrus 9104
 - strawberry 7542
 - quality, apple 2597
 - ripening, tomato 6103
 - hypobaric, tomato 6104
 - hypobaric system
 - fruit trees and plants, annual report, USA 3348
 - fruits 1705
 - packing methods compared, apple 1791
 - peach, annual report, Canada 2515
 - relative humidity
 - capsicum 8763
 - disease incidence, apple 4224
 - disorder incidence, apple 4224
 - eggplant 8763
 - respiration
 - apple 981
 - citrus 9104
 - strawberry 3558
 - small unit, apple 8414
 - systems, nitrogen addition, fruit 3361
 - temperature, natsudaikai 7154
 - varietal behaviour, apricot 2615
- dips
 - apple 486
 - application, methods compared, tomato 6105
- disease control
 - Alternaria alternata*, pear, apple 5007
 - apple 5750
 - Botrytis cinerea*
 - pear, apple 5007

Storage contd.

dips contd.

disease control contd.

- Botrytis cinerea* contd.
 - thiabendazole, celery 6948
- Cercospora apii*, thiabendazole, celery 6948
- Colletotrichum gloeosporioides*
 - hot water, mango 7205
 - sodium diethyldithiocarbamate, mango 7205
 - zineb, mango 7205
- C. spp.*, eggplant 6051
- Diplodia* spp., lemon 6363
- Geotrichum* spp., lemon 6363
- mango 4871, 4873
- Penicillium digitatum*, lemon 6363
- P. expansum*, pear, apple 5007
- Phomopsis* spp., lemon 6363
- Rhizopus stolonifer*, benzyl isothiocyanate, papaw 7217
- Sclerotinia sclerotiorum*, thiabendazole, celery 6948
- Septoria apii*, thiabendazole, celery 6948
- stem end rot, benzyl isothiocyanate, papaw 7217
- disease incidence, DPA, apple 5008
- disorder control
 - internal breakdown, calcium, apple 3432
- scald
 - BHT, apple 8419
 - DPA, apple 1800, 8419
 - ethoxyquin, apple 1800
- fruit ripening, growth substances, guava 9176
- residues, ethylene dibromide, mango 3243
- rot control
 - bordeaux, apple 7413
 - zineb, apple 7413
- thiabendazole, determination, citrus 2403
- diseases
 - apple 1747, 4227
 - control
 - banana 9106
 - citrus 9106
 - grapevine fruit 9106
 - pear 4227
- disorders
 - coatings, fungicides, grapefruit 7152
 - growth substances, apple 7408
 - onion 3771
- fruit, review 5690
- growth substances
 - treatment
 - root colour, carrot 1308
 - root composition, carrot 1308
- harvesting
 - date, apple 8415
 - time of, peach 8463
- losses, tropical crops 4147
- methods compared, onion 2835
- packing methods compared, apple 1791, 2596
- pest incidence, *Araecerus fasciculatus*, coffee 8156
- plastic bags
 - apple 5747
 - nitrogen, content, grapevine 5830
 - orange 3150
 - pear 5747
- pre-cooling
 - apple 8415
 - disorders, apple 2597, 2600
 - equipment, fruit 2646
 - fruit, ripening, plum 525
 - mobile unit, small fruits 2672
 - rots, apple 2597, 2600
 - vegetables, annual report, UK 2743
- quality
 - cultural methods, apple 6590
 - environmental factors, apple 6590
- rind curing, mandarin and tangerine 9105
- root, quality, hybrids, celeriac 2902
- rots, mango 4871
- sand, nitrogen, content, grapevine 5830
- soil management, apple 8415

Storage contd.

sulphur dioxide

application

- container generators, grapevine fruit 596, 3599
- potassium metabisulphite, grapevine fruit 595
- temperature
 - capsicum 8763
 - disorder incidence, pineapple 6419
 - eggplant 8763
 - fruit
 - colour, orange 5573
 - composition, citrus 5573
 - plant, weight loss, lettuce 7636
 - respiration
 - avocado 9073
 - vegetables 2744
 - tomato, 2853
 - vegetables, review 7612
 - water removal from fruit in plastic bags, low temperature breakdown, apple 487
 - wax coatings
 - apple 2600
 - chilling injury, prevention, grapefruit 8098
 - fungicides
 - biphenyl, residues, citrus 2404
 - sodium 2-phenylphenate, residues, citrus 2404
 - wraps, apple 8415
- Straw bales**
 - capsicum growing 4535
 - chrysanthemum growing 1142, 6143
 - cucumber and gherkin growing 4451
 - annual report
 - Belgium 4363
 - UK 6773-6774
 - nutrition 5213
 - stock growing 1142
 - vegetable growing 1142
- Strawberry**
 - annual report
 - Belgium 1060, 4297, 5071, 6691
 - Canada 538, 2669, 6668, 7488
 - German Federal Republic 5094, 6669, 8481
 - Irish Republic 1857
 - Netherlands 100, 5073, 5095, 6670
 - New Zealand 5074
 - Sweden 5075
 - UK 1855-1856, 1872, 3514-3515, 3533-3534, 5076, 5096, 7489
 - USA 1440, 3516, 5077-5078, 6692, 7490
 - Yugoslavia 3517
 - breeding and selection 8502
 - annual report
 - India 2668
 - UK 3535
 - disease resistance
 - Colletotrichum fragariae* 1885
 - Diplocarpon earliana* 3536
 - Phytophthora fragariae* 7520
 - fruit, quality 3537
 - interspecific hybridization 1874
 - calcium, content, plant, disorders 4329
 - chlorophyll, content, plant nutrition 5815
 - drought 8285
 - resistance, evaluation techniques 8508
 - economics 4320
 - EEC 3343
 - Switzerland 7519
 - UK 3343
 - electromagnetic field treatment 7541
 - flowering, secondary, photoperiodism 3555
 - forcing
 - annual report, Netherlands 1068
 - chilling requirements 3553
 - dormancy 3553
 - Italy 2159, 5159
 - light 5820
 - tunnels 3554
 - heating 2696
 - frost
 - injury, root 2554
 - protection, foam 8768
 - fruiting
 - autumn 5103
 - photoperiodism 1889-1890

Strawberry contd.

- fruiting *contd.*
 - photoperiodism 8521-8523
 - second crop 8521-8523
- fungicides
- injury 109
 - Bayer 47351 8514
 - benomyl 1073
 - captan 1073
 - dichlofluanid 547, 1073
 - thiram 1073
- interaction, nematocides 8514
- residues
 - determination
 - benomyl 6501, 7609
 - dichlozoline 8590
 - thiabendazole 6501
 - fruit
 - dichlofluanid 1073
 - tri-dimethylthiocarbamoyl-arsin 2704
- translocation
 - benomyl 5102
 - MBC 5102
- growing 4320
 - autumn cropping 1889-1890, 3556, 5103
 - German Federal Republic 7518
 - under glass 1139, 1686, 1878, 3545
 - varieties 1069
 - in greenhouses 5820
 - Belgium 7531
 - late harvesting 8505-8506, 8519-8523
 - under plastic 1686
 - Belgium 7531
 - injury 3546
 - types compared 3546
 - protected cultivation, symposium 6698
 - Spain 1873
 - sub-tropics, USA 4321
 - symposium, Canada 8500
 - Tunisia 4369
 - tunnels 1686, 1878, 1889-1890
 - plastic 6700, 7531
 - fruit
 - ripening, ventilation 7530
 - size, ventilation 7530
 - use of plastic materials 2738
 - vineyards 544
- harvesting
 - mechanical 549
 - annual report, Italy 6714
 - equipment 2672
 - mobile platform 1891
 - once-over 8524
 - heat treatment 1690
 - clonal selection 5097
 - mite control, runners 8516
 - virus control 7536
- herbicides 3323
 - injury
 - prevention, simazine 545
 - simazine 8511
 - plant composition, simazine 545
 - residues
 - fruit
 - atrazine 2700
 - chlorthal dimethyl 546
 - 2,4-DES 546
 - Eptam 2700
 - prometryne 2700
 - simazine 2700
 - trietazine 2700
 - vernolate 1698
 - soil, dalapon 2699
- historical survey 4320
- insecticides
 - residues
 - arsenic 3329
 - fruit, phosalone 8517
- lead, residues 4936
- light
 - emission, leaf, drought resistance 8508
 - intensity 544
 - supplementary, forcing 5820
- mulching
 - paper, plastic coated 6699
 - plastic 1879, 2738, 4327, 6696, 6699-6700, 7529, 7531
 - soil 6700
- nematocides, interaction, fungicides 8514
- packing, plastic 1879

Strawberry contd.

- phosphorus, content, fruit, nitrogen nutrition 8513
- photoperiodism
 - autumn cropping 1889-1890
 - flowering, secondary 3555
 - forcing 5820
 - fruiting 8521-8523
 - second crop 8521-8523
- photosynthesis
 - growth substances 5819
 - plant nutrition 5815
- planting
 - bed systems 5099
 - herbicide residues 2699
 - leaf desiccation 7528
 - material
 - quality, growth substances 2693
 - storage 3544
 - cold 7527
 - containers, plastic 1879
 - plant, size 543, 1876, 2694-2695
 - spacing 5099, 6695-6696, 7529
 - economics 6695
 - time 1876, 2694-2695, 6696
 - Israel 3540
 - pollination, compatibility 1069
 - polyploids, haploid induction from 8501
 - potassium, content, fruit, nitrogen nutrition 8513
 - processing, freezing 6711
 - production and trade
 - EEC 3343
 - UK 3343
 - rainfall, disease incidence, *Botrytis cinerea* 7539
 - replanting, soil, fumigation, fungus control 3547
 - research, review 2670
 - respiration
 - fruit
 - gamma rays 1504
 - storage, controlled atmosphere 3558
 - leaf, growth substances 5819
 - runner
 - development, growth substances 6709
 - formation, growth substances 6708
 - production 6710
 - electromagnetic field treatment 7541
 - growth substances 6710
 - rooting
 - date
 - fruit number 6697
 - fruit size 6697
 - storage 109
 - cold 3544
 - late fruit harvesting 8523
 - plastic bags 3544
 - soiless culture, nutrient solution, addition, algae, *Anabaena cylindrica* 2701
 - storage
 - cold, plants 7527
 - controlled atmosphere
 - disease incidence 7542
 - fruit
 - composition 3558
 - flavour 7542
 - hypobaric system 1705
 - respiration 3558
 - pre-cooling, equipment 2646
 - temperature 5821
 - taxonomy 4320
 - transport
 - damage 7307
 - pre-cooling 1077
 - vitamins, content 3339
 - water relations, study technique, phosphorus-32 beta gauge 8518
 - weed control 546, 1946, 2697-2698, 4326, 5680, 7532, 8509-8512
 - wind
 - damage 1877
 - protection 5808
 - windbreaks, plastic 7531
 - winter hardiness, measurement 8507

Strawberry diseases

- Botrytis cinerea* 547, 1073, 1882-1884, 3319, 4324, 7539
- boron nutrition 5817
- control 6707, 7538, 8482
- methods compared 6705-6706
- copper nutrition 5817

Strawberry diseases contd.

- Botrytis cinerea contd.*
 - fruit storage, controlled atmosphere 7542
 - incidence 4323
 - irradiation, ionizing 604
 - manganese nutrition 5817
 - storage rots 1078
 - varietal resistance 4323, 5813, 7524-7525, 8504
- B. spp.* 5731
 - control, controlled atmosphere storage 3558
 - protected cultivation 1878
- Colletotrichum dematium*
 - pathogenicity 8515
 - symptoms 8515
- Colletotrichum fragariae* 1867, 1885, 5100
 - varietal resistance 5814
- Corynebacterium fascians*, -nematode complex 5699
- Dendrophoma obscurans* 2702
- Diplocarpon earliana* 1073
- varietal resistance 3536
- Fusarium sporotrichiella* 5101
- Gnomonia fructicola* 4331
- green petal, varietal resistance 1881
- Hainesia lythri*, storage rots 1078
- Marssonina potentillae* 4324
- mottle, vectors, *Pentatrichopus fragaefolii* 7537
- Mycosphaerella fragariae* 1073, 1883-1884, 4324
 - boron nutrition 5817
 - control 8482
 - copper nutrition 5817
 - manganese nutrition 5817
- Phytophthora cactorum* 1071
- P. fragariae*
 - detection 1074
 - resistance, breeding and selection 7520
 - varietal resistance 7524-7525
- Pythium* spp. 108
- Rhizoctonia fragariae* 1886
- soil-borne 3319
- Sphaerotheca fuliginea*, varietal resistance 8504
- S. humuli* 3550
- Sphaerotheca macularis* 1072, 4324
 - protected cultivation 1878
 - varietal resistance 3539
- Typhula* spp., stored runners 109
- Verticillium albo-atrum*
 - control 7540
 - soil, drenches 3550
- V. dahliae* 111
- soil
 - amendments 110
 - fumigation 3325
 - varietal resistance, temperature 3325
- Verticillium* spp., varietal resistance 7524-7525
- virus 3549
 - heat treatment 7536
 - indexing, annual report, Canada 6667
 - varietal resistance 4324
 - yield reduction 4330

Strawberry disorders

- chlorosis, nutrition 106
- tipburn, calcium deficiency 4329

Strawberry flower

- bud initiation 1888
- growth substances 1888, 6710
- removal
 - chemical 8519-8520
 - for later cropping 8519-8520
 - ever-bearing varieties 4333

Strawberry fruit

- amendments, peat 1880
- amino acids, content, potassium nutrition 7535
- anatomy, varietal differences 7543
- composition 101
 - boron nutrition 5817
 - copper nutrition 5817
 - manganese nutrition 5817
 - potassium nutrition 7535
 - vitamins, freeze dried 112
- development 548
- flavour, storage, controlled atmosphere 7542
- irradiation, ionizing, disease control 604

Strawberry fruit *contd.*

- loosening, growth substances, ethephon 5801
- maturity, growth substances 6710
- number
 - growth substances, GA 3557
 - runner rooting date 6697
- peduncle, removal force, varietal differences 7543
- pigments, biosynthesis 548
- post-harvest treatment, gamma rays, respiration 1504
- quality
 - boron nutrition 5817
 - copper nutrition 5817
 - growth substances 6708
 - manganese nutrition 5817
- ripening 548
 - growth substances, GA 3557
 - leaf removal 7533
 - mulching 4327
 - nutrition 1880
 - tunnel ventilation 7530
- senescence, polysaccharides, content 548
- size
 - growth substances, GA 1880, 3557
 - planting, date 2694
 - runner rooting date 6697
 - soiless culture, nutrient solution, algae 2701
 - tunnel ventilation 7530
- sugars
 - content 548
 - potassium nutrition 7535

Strawberry growth substances

- endogenous
 - leaf 4332
 - runner bud 4332
- flower, removal, Off-Shoot-T 8519–8520
- flower bud, initiation, GA 1888, 6710
- flower removal, Off-Shoot-T 4333
- fruit
 - loosening, ethephon 5801
 - maturity, GA 6710
 - number, GA 3557
 - quality
 - aminozide 6708
 - chlormequat 6708
 - ripening, GA 3557
 - size, GA 1880, 3557
 - photosynthesis, abscisic acid 5819
 - planting material, quality, chlormequat 2693
 - respiration, abscisic acid 5819
 - responses
 - chlormequat, review 8310
 - GA 3540
 - runner
 - development, GA 6709
 - formation
 - aminozide 6708
 - chlormequat 6708
 - production, GA 6710

Strawberry hybrids, disease resistance, *Diplocarpon earliana* 3536**Strawberry leaf**

- analysis, sampling 6693
- calcium, content, NPK nutrition 6702
- light emission, drought resistance 5808
- magnesium, content, NPK nutrition 6702
- nitrogen, content, NPK nutrition 6702
- phosphorus, content, NPK nutrition 6702
- potassium, content, NPK nutrition 6702
- removal 4328, 7533

Strawberry nutrition

- boron
 - application, foliar 5816
 - disease incidence 5817
 - fruit
 - composition 5817
 - quality 5817
- calcium, deficiency, tipburn 4329
- copper
 - application, foliar 5816
 - disease incidence 5817
 - fruit
 - composition 5817
 - quality 5817
- FYM 1880

Strawberry nutrition *contd.*

- general
 - fruit, composition 8513
 - leaf analysis, symposium 2489
- iron, chlorosis 106
- leaf-fruit relationships 869
- major elements
 - application, foliar 5815
 - leaf analysis 3548
- manganese
 - application, foliar 5816
 - disease incidence 5817
 - fruit
 - composition 5817
 - quality 5817
- Maxicrop 5098
- minor elements
 - application, foliar 5815
 - leaf analysis 3548
- nitrogen 8514
 - application, foliar 1880
 - sources, compared 7534
 - sources compared 1880
 - toxicity 7534
- NPK 6701
 - application, foliar 5816
 - leaf analysis 6702
 - soil composition 6703
- potassium, fruit, composition 7535
- sulphur, chlorosis 106

Strawberry pests 6704

- Anthonomus rubi* 8517
- Aphelenchoides fragariae*
 - annual report, German Federal Republic 4298
 - bacteria complex 5699
- A. ritzema-bosi* 3551
- A. ritzemabosi*, annual report, German Federal Republic 4298
- aphids 107
- Aphis forbesi* 5079
- Brachyrhinus rugosostriatus* 1076
- coleopterous larvae 107
- integrated control 2703
- Lygus lineolaris* 1887
- mites 107
- moths 107
- Otiorrhynchus sulcatus* 5818
- Pentatrachopus fragae-folii* 5079
 - vectors, mottle 7537
- slugs 107
- Tarsonemus fragariae* 1075
 - control 8516
- Tetranychus telarius*
 - annual report, UK 3552
 - varietal resistance 6694
 - various, control 6586

Strawberry plant, storage, cold 7527**Strawberry propagation**, virus-tested plants 7536**Strawberry seed**, composition 101**Strawberry soil**

- amendments, olive pulp 1880
- fumigation 1879
- fungus control
 - DD 3547
 - methyl isothiocyanate 3547
- injury, Vorlex 8514
- nematodes, Vorlex 8514
- Verticillium dahliae*
 - chloropicrin-methyl bromide mixture 3325
 - Ditrapex 3325
- heating 2696
- micro-organisms, amendments, *Verticillium dahliae* 110
- nutrients
 - accumulation, bed systems 5099
 - availability 6703
- sickness 3547
- temperatures, frost injury 2554
- types, plant composition 7818

Strawberry varieties 2692

- annual report, UK 3538
- autumn harvesting 5103
- Bilyana, white-fruited 4324
- Bounty 3543
- comparative trials 3541, 7521
- annual report, German Federal Republic 5072
- Israel 3540
- Italy 3542, 5098
- Netherlands 5813

Strawberry varieties *contd.*

- comparative trials *contd.*
 - Sweden 8503
 - Switzerland 4322
 - UK 1070
- disease resistance 1881
 - Botrytis cinerea* 4323–4324, 5813, 7524–7525, 7539
 - Colletotrichum fragariae* 1885, 5814
 - Diplocarpon earliana* 3536
 - Marssonina potentillae* 4324
 - Mycosphaerella fragariae* 4324
 - Phytophthora fragariae* 7520, 7524–7525
 - Sphaerotheca macularis* 3539, 4324
 - Verticillium dahliae* 3325
 - Verticillium* spp. 7524–7525
 - virus diseases 4324
- Fanyl 4325
- Fraginetta 1875
- fruit
 - anatomy 7543
 - peduncle, removal force 7543
 - quality 5822
- Gorella, clonal selection 5097
- greenhouse 1069
- Havelland 1875
- Holiday 7526
- late cropping 8523
- Netherlands 7522
- pest resistance, *Tetranychus telarius* 6694
- Pocahontas 5103
- processing 541
- freezing 540, 6711
- Rainier 8504
- Redgauntlet, autumn harvesting 3556
- Regina, clonal selection 5097
- register, USA 3556, 4156
- Sicily 542
- Sivetta 7524–7525
- Switzerland 4322
- Tago 7524–7525
- Tenira 7524–7525
- Turkey 7523
- USA 4321
 - winterhardiness 3358
- virus tolerance 539

Strelitzia spp.

- intercropping
 - kohl-rabi 8879
 - ornamental plants 8879
- photosynthesis, leaf tearing 382
- water relations, leaf tearing 382

Streptocarpus spp.

- annual report, UK 3832
- genetics, male sterility 1351
- growth substances, endogenous, leaf 7890
- propagation, leaf, tissue culture 7890
- tissue culture
 - leaf
 - growth substances, treatment 7890
 - mother plant treatment 7890
 - temperature 7890

Streptomyces scabies, radish diseases 3672**S. spp.**

- antibiotics, production 4475
- carrot diseases, annual report, German Federal Republic 7599

Stromatinia gladioli, gladiolus diseases,

- annual report, Netherlands 6961

S. spp., bulbs, diseases 6165**Strontium**

- absorption
 - mitochondria, bean (*Phaseolus*) 187
- reduction, clinoptilolite, contaminated soils, bean (*Phaseolus*) 2789
- root, mechanism, tomato 4561
- content
 - leaf, bean (*Phaseolus*) 2010
 - pod, bean (*Phaseolus*) 2010

Strophanthus spp.

- flavonoids, phenol compounds 4727
- steroids, biosynthesis 1435
- taxonomy, chemotaxonomy 4727

Stropharia rugosa annulata, edible fungi 6958**Strumeta tryoni**

- banana pests, annual report, Australia 5600
- tomato pests, annual report, Australia 5882

Strychnos spp.

- alkaloids 6318
- medicinal properties 6316
- review 6317

Strychnos usambarensis, alkaloids 9060-9061**Stylosanthes guyanensis**, as a cover crop, oil palm 7209**S. spp.**

- as a cover crop
- citrus 5551
- tea 8269
- ground cover plants, coffee 7190

Styrax officinalis, fruit, oil, composition 9067**Sub-tropical crops**

- fungicides, disease control, copper, review 1694

- irrigation, requirements 6326

Sugar cane**annual report**

- Australia 9219
- East Africa 8188
- Guyana 9220
- Philippines 8189
- Sarawak 4036
- South Africa 7230
- USA 1530, 9221
- West Indies 4080

- boron, translocation 4102

- breeding and selection 2465, 3259
- growing in pots, rapid screening 8192
- polyploid, induction 403

- calcium, content, leaf, flooding 8200

- carbohydrates, translocation 4101

- carbon monoxide, metabolism 9261

chlorophyll**content**

- cold treatment 8247
- diseased plants 8247
- enzyme activity 9260

- chloroplasts, starch, content, temperature 4088

- climate, yield 7234

- clones, Venezuela 8197

- cold, injury 4088

- cold treatment, photosynthesis 8247

- drought 2474

- leaf, composition 2474, 8200

- sucrose, accumulation 404

- economics, plant nutrition 9245

enzyme activity**cane**

- growth 2475

- ripening 2475, 6449

leaf

- chlorophyll, content 9260

- light 8251

- manganese deficiency 1632

- sugars, content 1632

- photosynthesis 8248

- plant 8252

root

- boron toxicity 8217

- ethylene production 4103

- starch degradation 1647

enzymes

- leaf, light 8251

- plant 8252

- shoot 1648

- varietal differences 8191

- flooding 2474

- leaf, composition 2474, 8200

- root systems 8253

- varietal tolerance 8253

flowering

- control, herbicides 1651

- photoperiodism 8250

- relative humidity 8250

- fluorine, determination 4089

frost

- injury, sucrose, content 9232

resistance

- irrigation 9233

- varieties 9233

fungicides**application**

- under air pressure

setts

- benomyl 8229

- captan 8229

- PCNB 8229

Sugar cane contd.**growing**

- Ghana 4882

- USA 4883

- growth, factors affecting, review 408

- growth studies 6447

harvesting

- burning 2478, 6434, 7259

- cane deterioration 7260, 8259

- carbohydrates content 9268

- chopping, cane deterioration 8259

- desiccation, herbicides 4894

- deterioration 1654-1655, 6452,

- 7259-7260, 8259

- labour requirements 5656

- mechanical 4105, 4894

- choppers 5657, 6451

- equipment 8258

- for lodged cane 8257

- review 6450

- trash removal 8260

- wholestick cutters 6451

- windrower 6453

- time of 428, 7257

- cane maturity

- analysis 7258

- sampling 7258

- cane quality 9266

- varietal differences 7262

- nitrogen nutrition 1626

- ratoon age, sucrose content 7256

heat treatment

- equipment 7242

- fungus control 8230

- virus control 7240, 8223, 8230, 9252

- sett 8225

herbicides 3321

- disease incidence

- atrazine 5652

- dalapon 5652

- diuron 5652

- enzyme activity, inhibition, paraquat 8251

- injury 405

- application methods, 2,4-D 7238

- dalapon 847

- diuron 847, 4886, 8206

- 2,4-D 9237

- prevention, 2,4-D 7238

- terbacil 9237

persistence

- ametryne 9236

- atrazine 9236

- diuron 9236

- linuron 8206

- physiological responses, atrazine 3256

- residues, plant, picloram 9241

- soil pH 5652

tolerance

- dalapon 9239

- diuron 4886

- 2,4-D 7238

- fenac 9239

- terbacil 9239

- triazines 1650

- translocation, picloram 9241

humidity, relative

- boron, absorption 4102

- flowering 8250

- varietal behaviour 8250

- water relations 4102

- hybrids 9225

insecticides

- injury, application methods, BHC 8236

interaction

- nitrogen nutrition

- BHC 7251

- Telodrin 7251

pest resistance

- Aeneolamia varia saccharina*

- aprocab 8235

- carbamates 9254

- carbaryl 8235

residues

- determination 7249

soil

- aldrin 5653

- dieldrin 5653

- yield increase, isobenzan 7250

intercropping

- crops compared 9235

- economics 9235

Sugar cane contd.**intercropping contd.**

- onion 8202

various crops

- soil, temperature 2467

- sunlight, absorption 2467

- vegetables 5650

irrigation 8211

- economics, Argentina 6436

- frost resistance 9233

- furrow 2468, 8209

- requirements 8210, 9242

- determination 6436, 7239

- saline water 6439

- plant composition 4888

- salinity problems 407, 6439

- spray 407

- sub-surface 2468

- Ivory Coast, annual report, France 5647

juice

- determination 9226

quality

- cane age 9267

- desiccation 4894, 9267

- harvesting methods 9260

- irrigation 8210

- nitrogen nutrition 8202

- silicon, determination 3260

light

- enzyme activity, leaf 8251

intensity

- boron, absorption 4102

- water relations 4102

sunlight

- absorption, intercropping 2467

- soil, temperature, intercropping 2467

- utilization, growth responses 408

magnesium**content****leaf**

- drought 8200

- flooding 8200

- Malagasy Republic, annual report, France 5647

nematicides**application**

- methods compared

- aldicarb 7246

- DBCP 7246

- DD 7246

- EDB 7246

- Niger Republic, annual report, France 5647

nitrogen**content**

- Sugar cane contd.**
 potassium contd.
 content contd.
 leaf contd.
 flooding 8200
 products and by-products
 bagasse, mushroom compost 8820
 filter cake, as a fertilizer 7263, 5659
 rainfall, sucrose, content 9232
 replanting, economics 9222
 report, USA 6382
 Reunion, annual report, France 5647
 rhizosphere, enzyme activity 4103
 ripening
 chemical 1653, 7254–7255, 8256
 enzyme activity 2475, 6449
 growth substances 1652
 aminozide 6449
 chlormequat 6449
 ethephon 6449
 60-CS-160 6449
 sucrose, accumulation 404
 rodenticides, residues, plant, zinc
 phosphide 3258
 sett
 coatings 6430
 fungus transmission, *Cephalosporium sacchari* 4098
 germination
 coatings 6430
 temperature 4088
 urea treatment 1634
 heat treatment, pest control 9256
 treatment, fungicides 6431, 8228–8229
 silicon, determination, colorimetric 7287
 spraying, aerial, insecticides 4893
 statistical, design of trials 8190
 stomata, number, disease resistance 5648
 sucrose
 content
 climate 7234, 9232
 cold 404
 drought 404
 estimation method 5658
 harvesting, time of 7256
 irrigation 8210–8211
 leaf sheath moisture 4090
 measurement 1644
 nitrogen nutrition 4090, 9246
 planting, time 7256
 temperature 4088
 sugars
 accumulation 6448
 translocation 1643
 sunlight, utilization, yield potential 7261
 taxonomy, chemotaxonomy 8191
 temperature 6447
 boron, absorption 4102
 sucrose accumulation 404
 sucrose content 4088
 water relations 4102, 6447
 tissue culture
 callus 4087
 cell suspension 403
 media 2476
 leaf, herbicides, treatment 7253
 pith, herbicides, treatment 7253
 shoot-tip, herbicides, treatment 7253
 transpiration
 anti-transpirants
 boron, absorption 4102
 water relations 4102
 evapo-
 estimation 9263
 measurement 9262
 water relations 4100, 8249, 9262–9263
 anti-transpirants 4102
 disease incidence, *Cephalosporium sacchari* 7244
 light 4102
 lysimeters 427
 physiology 1645
 relative humidity 4102
 salinity 6439
 temperature 4102, 6447
 weed control 405–406, 4885, 5651,
 6434–6435, 7235–7237, 8203, 8205,
 8207–8208, 9236–9240
 annual report, East African Community
 5617
Cyperus spp. 8206
 herbicides compared 1622
 review 8121
- Sugar cane contd.**
 weeds 9237–9238
 competition 8204
 yearbook, South African 7229
 yield
 climate 7234
 design of trials 8190
 potential, sunlight utilization 7261
- Sugar cane, cane**
 age, juice quality 9267
 breakage
 measurement 9234
 varietal differences 9234
 carbohydrates
 content
 harvesting 9268
 maturation 9268
 composition
 drought, leaf size 8261
 seasonal variations 7262
 fibre, determination 9226
 maturity
 analysis 7258
 forecasting 2477
 planting, time 6432–6433
 sampling 7258
 varietal differences 8195
 quality
 determination, methods 1656
 drought, leaf size 8261
 harvesting methods 9268
 leaf sheath moisture content 8213
 seasonal variations 7262
 rind hardness 9224
 ripening
 growth substances 9265
 silicon nutrition 9265
 sugars, content, enzyme activity 2475
 water
 content
 irrigation requirements 7239
 soil moisture 7239
- Sugar cane diseases**
Cephalosporium sacchari
 transmission, sett 4098
 water relations 7244
Ceratocystis adiposa 4097
Ceratocystis paradoxa 6431, 7240
 sett treatment 8228
 soil moisture 8227
 temperature 8227
Cercospora koepkei 1635, 6444
C. longipes, East Africa, survey 8220
 chlorotic streak, soil amendments 8221
Cochliobolus lunatus 4097
Colletotrichum falcatum, planting
 material, treatment 8229
 control, Taiwan 7240
Curvularia senegalensis 4097
Drechslera hawaiiensis 4097
D. rostrata 4097
 fiji disease
 control 8219
 detection 420
 incidence 8219
 report, Australia 4094
 vectors 421, 1633
Fusarium moniliforme, Mexico 6440
F. oxysporum, herbicides 5652
F. solani, herbicides 5652
F. spp.
 sett germination 850
 varietal resistance 850
Glomerella tucumanensis
 heat treatment 8230
 varietal resistance 8194
 screening method 1636
 grassy shoot
 control 9250
 heat treatment 8230
 method 1634
 incidence 4095
 review 8222, 9250
 sett propagation 9249
Helminthosporium sacchari
 histology 424
 resistance 8231
Leptosphaeria taiwanensis
 resistance 4087
 varietal resistance 4083
 mosaic 6442
 heat treatment 8225
 Mexico 6440
- Sugar cane diseases contd.**
 mosaic contd.
 photosynthesis 8247
 varietal resistance 4086, 9251
 vectors, aphids, annual report, USA
 6383
 mosaic virus, hot water treatment 6441
Pythium arrhenomanes, soil micro-
 organism antagonism 415
 ratoon stunting 6442
 heat treatment 7240, 8223, 8230, 9252
 equipment 7242
 Mexico 6440
 varietal resistance 8224
 ratoon stunting virus 7241
 hot water treatment 422, 6441
Sclerospora sacchari
 control 8219
 incidence 8219
 resistance 5648
 streak
 varietal resistance 4086
 vectors, *Aceria sacchari* 6443
 striate mosaic 4096
Ustilago scitaminea 4097, 4890
 East Africa, survey 8220
 environmental factors 8429
 plant thinning 7245
 planting density 7245
 seasonal susceptibility 6429
 varietal resistance 845, 4085, 6429,
 6445–6446, 7231
 varietal susceptibility 4884
U. spp. 422
 varietal resistance 4086
 white leaf, vectors, *Matsumuratettix hiroglyphicus* 7243
Xanthomonas albilineans 423
 control 8226
 varietal resistance 4084
X. vasculorum 4889
- Sugar cane disorders, red-freckle syndrome,**
 photosynthesis 8247
- Sugar cane flower**
 bud initiation 8254–8255
 growth substances, endogenous 9264
 photoperiodism 9264
- Sugar cane growth substances**
 cane
 ripening
 chlormequat 9265
 dalapon 9265
 ethephon 9265
 GA 9265
 endogeneous
 shoot-tip
 flower bud initiation 9264
 photoperiodism 9264
 plant composition, GA 1649
 responses, GA 4104
 ripening 1652
- Sugar cane leaf**
 analysis, sampling, time of 8214
 composition
 climate 8214
 diurnal variations 8214
 plant age 8214
 flower bud, initiation 8255
 nutrients
 content
 drought 8200
 flooding 8200
 removal, flower bud, initiation 8255
 sheath loosening, herbicides, dicamba
 6449
 sheath moisture content
 cane quality 8213
 pest resistance, *Aceria sacchari* 9227
 sheath size, pest resistance, *Aceria sacchari* 9227
 size, cane composition 8261
 sugars, content, enzyme activity 1632
 water content
 drought 2474
 flooding 2474
- Sugar cane nutrition**
 aluminium
 phosphorus absorption 7252
 toxicity 409
 boron
 absorption
 light 4102
 relative humidity 4102

Sugar cane nutrition contd.

- boron contd.
 - absorption contd.
 - temperature 4102
 - deficiency, root composition 8217
 - toxicity
 - enzyme activity 8217
 - root composition 8217
- calcium 419
- chlorine
 - deficiency 8218
 - requirements, varietal differences 8218
- distillery effluent 1625
- FYM 1624
- general
 - economics 9245
 - leaf analysis 8213, 9245
 - methods 413
- green manures 8215
- major elements
 - leaf analysis 412
 - plant analysis 6437
- manganese, deficiency, enzyme activity 1632
- manuring
 - filter cake 415
 - poultry litter 414
- minor elements
 - leaf analysis 412
 - plant analysis 6437
- nitrogen 412, 417-418, 1624, 1628-1629, 3257, 4090, 8211, 8215
 - application
 - methods compared 1630
 - time 1627
 - cane, juice quality 8202
 - enzyme activity, leaf 8251
 - harvesting, time of 1626
 - insecticides 7251
 - leaf analysis 1630, 8213
 - plant analysis 3257
 - sources, compared 8216, 9246
 - urea, slow-release 4092
- NPK 416, 848-849, 4091, 6438
 - soil compaction 8212
- phosphorus 412, 417, 1624, 1631
 - absorption, aluminium nutrition 7252
 - leaf analysis 9247
 - soil analysis 9247
- potassium 412, 417
 - deficiency 409
- rubidium, soil compaction 8212
- silicon 4093, 4887
 - cane, ripening 9265
 - deficiency, symptoms 4887
 - phosphorus metabolism 7252
- soil analysis, techniques 1628
- sulphur 409
 - leaf analysis 9247
 - soil analysis 9247
- zinc, deficiency 409

Sugar cane pests

- Aceria sacchari*
 - cane age 9253
 - incidence 9253
 - varietal resistance 9227
 - vectors, streak 6443
- Aeneolamia postica*, Mexico 6440
- A. varia saccharina*
 - aerial spraying 8235
 - control 4891
 - insecticides, resistance 8235, 9254
- Antitrogonus mussoni*, insecticides, application, methods compared 8236
- ants 4882
- Aphaenogaster pythia* 1638
- aphids, vectors, mosaic, annual report, USA 6383
- Aulacaspis tegalensis* 9256
 - control, cultural methods 8237
 - East Africa, survey 8220
 - biological control 2470
- borers, parasites, *Apanteles flavipes* 9255
- Chilo indicus*, incidence 853
- C. infuscatellus*
 - incidence 853
 - parasites 1641
- C. spp.*, Mexico 6440
- Chilotraea auricilia*, incidence 851, 4892
- Criconemoides ornatus* 7246
- Diatraea centrella*, Bahamas 8238
- D. lineolata*, Bahamas 8238

Sugar cane pests contd.

- Diatraea* contd.
 - D. saccharalis*
 - 2472
 - parasites 2469
 - predators 8239
 - varietal resistance 1617, 2466, 2472, 8193
 - D. spp.*
 - aerial spraying 8235
 - biological control, review 1640
 - damage, assessment 2471
 - Mexico 6440
 - parasites 5654
 - Eldana saccharina*
 - control, cultural methods 8240
 - East Africa, survey 8220
 - gophers, control 9258
 - Hoplolaimus* spp. 7246
 - insects
 - control, review 1532
 - damage assessment 4081
 - Longiunguis sacchari*, aerial spraying 8235
 - Macropes excavatus* 7247
 - Matsumuratettix hiroglyphicus*, vectors, white leaf 7243
 - Melampsalta puer*, population survey 1638
 - Melampsatta puer*, biological control 1638
 - Melanaspis glomerata* 852
 - Meloidogyne* spp. 7246
 - crop rotation 425
 - Mogannia hebes*
 - fungal parasites 9257
 - Taiwan 7240
 - moths 8234
 - Mythimna phaea*
 - biological control 8234
 - damage 8234
 - forecasting, light traps 8234
 - nematodes, Taiwan 7240
 - Numicia viridis*
 - aerial spraying 8241
 - parasites 8241
 - varietal resistance 7248
 - Oligonychus indicus*, control 8232
 - Perkinsiella saccharicida*
 - biological control 1637
 - virus vectors 1633
 - P. saccharina*, vectors, fiji disease 421
 - Pratylenchus* spp. 7246
 - Pyrilla* spp. 2473
 - aerial spraying 4893
 - Radopholus similis*, alternative hosts 7608
 - rats
 - control, zinc phosphide 8244-8246
 - damage 9259
 - damage assessment 4081
 - Mexico 6440
 - review 1642
 - review, Bolivia 5671
 - Rhabdoscelus obscurus* 4099, 5653
 - biological control 5653
 - varietal resistance 4082
 - rodents 7170
 - Mexico 6440
 - Rotylenchus* spp. 7246
 - Saccharicoccus sacchari*
 - East Africa, survey 8220
 - parasites, *Anagyrus saccharicola* 8242
 - Saccharosydne saccharivora*, host-pest relationships 8243
 - Schizotetranychus andropogoni* 8233
 - Scirpophaga nivella* 426
 - varietal resistance 1639
 - Sipha flava*, aerial spraying 8235
 - survey
 - Australia 9248
 - Malagasy Republic 9248
 - Mauritius 9248
 - Tapajosa rubromarginata*, biological control 5655
 - Trichodorus* spp. 7246
 - Tryporyza nivella*, incidence 853
 - Xiphinema* spp. 7246
 - Zeadiatraea* spp., Mexico 6440
- Sugar cane plant**, composition, irrigation, saline water 4888
- Sugar cane propagation**
 - leaf, tissue culture 7253

Sugar cane propagation contd.

- pith, tissue culture 7253
- sett, bud position on source plant, virus incidence 9249
- shoot-tip culture 7253
- Sugar cane root**
 - anatomy 9223
 - composition, boron nutrition 8217
 - systems
 - flooded tolerance 8253
 - varietal differences 8253
- Sugar cane soil**
 - amendments
 - compost 8216
 - molasses, disease incidence 8221
 - scums, disease incidence 8221
 - compaction 411
 - nutrient absorption 8212
 - cultivation 8198, 8205
 - depth 9230
 - micro-organisms 9243
 - moisture
 - conservation, asphalt barriers 410
 - plant growth 9242
 - pH
 - disease incidence 5652
 - herbicides 5652
 - salinity, water table 8199
 - structure, amendments 8216
 - temperature 6447
 - intercropping 2467
 - types
 - Argentina 9244
 - Zambesi delta 1623
 - water table 8199, 8212
 - varietal behaviour 8201
- Sugar cane varieties**
 - B.L.4 1619
 - Brazil 4884
 - cane
 - breakage 9234
 - quality, seasonal variations 7262
 - chlorine, deficiency, resistance 8218
 - Co. 1053 846
 - India 7232
 - Colombia 5649
 - Co.L.29 1619
 - comparative trials 8195
 - Co.1336 9228
 - disease incidence, grassy shoot 4095
 - disease resistance 845, 850
 - Glomerella tucumanensis* 8194
 - Leptosphaeria taiwanensis* 4083
 - mosaic 9251
 - screening method 1636
 - Ustilago scitaminea* 4085, 6429, 6445-6446, 7231
 - U. spp.* 4086
 - virus 4086
 - Xanthomonas albilineans* 4084
 - flooded tolerance 8253
 - frost resistance 9233
 - Ghana 4882
 - harvesting, time of 7257
 - herbicides, tolerance 4886, 7238
 - identification, enzymes 8191
 - India 1618
 - ISD.5/55 9229
 - pest resistance 4082
 - Aceria sacchari* 9227
 - Diatraea saccharalis* 2466, 2472, 8193
 - Numicia viridis* 7248
 - Scirpophaga nivella* 1639
 - Q.86 1620
 - Q.90 7233
 - USA 6428
 - Venezuela 8196
 - water table depth 8201
- Sugars**
 - accumulation, fruit, citrus 9108
 - biosynthesis
 - coloured light, *Salvia sclarea* 7085
 - photoperiodism, *Salvia sclarea* 7085
 - content
 - boron nutrition, bean (*Phaseolus*) 3710
 - fruit 8667
 - berry fruits 101
 - citrus 7157
 - Citrus* spp. 7157
 - drought, mandarin and tangerine 8093
 - mutagens, tomato 7769

Sugars *contd.*content *contd.*fruit *contd.*

pruning and training, grapevine 8550

herbicides, simazine, apple 968

leaf, disorders, chrysanthemum 6972

light, black currant 4310

pruning, grapevine fruit 5844

seed

Iridaceae 8883

Liliaceae 8883

viability, oil palm, annual report, Nigeria 9181

seedling, growth substances, lettuce 6789

sub-tropical fruits, report, USA 6324

degradation, storage, lettuce 7636

determination, fruit, methods compared, tomato 2137

metabolism

leaf removal, apple 3414

ringing, apple 3414

root, pea 7741

shoot bending, apple 3414

translocation

phloem blockage, bean (*Phaseolus*) 5987

radish 8639

temperature, vegetables 5987

Sulphur

coated fertilizers, watermelon 3683

content

leaf

sugar cane, annual report, South Africa 7230

temperature, pea 2813

nitrogen nutrition, lawns and sports turf 6193

plant, air pollution, annual report, German Federal Republic 6481

deficiency

banana nutrition 825

cabbage, chinese 4423

coconut nutrition 841

enzyme activity, bean (*Phaseolus*) 3717

oil palm nutrition 841

symptoms, coffee 3198

determination, methods, sugar cane, annual report, USA 9221

fruit, sugars, content, tomato 6079

leaf analysis

carrot 6109

oil palm 7214

sugar cane 9247

tropical plants 3173

nitrogen metabolism, vegetables 6079

ozone injury, prevention, bean (*Phaseolus*) 2788

plant, flavour, watercress nutrition 1989

requirements

temperature, pea nutrition 2813

vegetables 4381

soil analysis, sugar cane 9247

Sulphur dioxide

amino acids, content, pea 6015

application

container generators, grapevine fruit 596

injury, grapevine 1916

potassium metabisulphite, grapevine fruit 595

storage

grapevine 1916

grapevine, fruit 7426

hop 1421

disease incidence, *Venturia inaequalis*, apple 4130

injury 4130

bedding plants 1322

annual report, Canada 8836

chrysanthemum 6132

greenhouse crops 7296

ornamental plants 6132

ornamental trees and shrubs 7845

annual report, Netherlands 6961

prevention, growth substances, poinsettia 8946

Prunus spp., annual report, Netherlands 5698

plant resistance, ornamental trees and shrubs 7845

Sulphur dioxide *contd.*

proteins, content, pea 6015

stomatal movements, bean (*Vicia*) 2039**Sunburn**

injury, prevention, whitewashing fruit, melon (cantaloup and musk) 622

injury prevention, white paint 3338

Sunlight

utilization

photosynthesis, grapevine 8565

yield potential, sugar cane 7261

Swede

annual report, UK 1936

cadmium, determination 4389

ethylene

treatment

root

lignin, biosynthesis 5934

phenolic acid, biosynthesis 5934

insecticides, residues 1173

lead, determination 4389

nutrient absorption

growth substances

benzyladenine, tissue culture 1956

kinetin, tissue culture 1956

respiration, root, heat production, storage 1148

storage, respiration, heat production 1148

thinning, spacing 7645

tissue culture, root, nutrient absorption, growth substances 1956

weed control 7653

Swede diseases*Erysiphe cruciferarum* 2757

Seedstock resistance 2757

Plasmidiophora brassicae

assessment methods 5165

resistance, breeding and selection 4426

varietal resistance 7640

Swede nutrition

boron, deficiency, annual report, German Federal Republic 7599

nitrogen 7645

phosphorus 7645

potassium 7645

Swede pests*Hylemya brassicae* 1173*H. spp.*, annual report, Canada 1944**Swede seed**disease resistant stocks, *Erysiphe cruciferarum* 2757

sowing, spacing 7645

Swede varieties, disease resistance,*Plasmidiophora brassicae* 7640**Sweet pea, seedling, growth, inhibition,***Coronilla varia* seed leachate 7625**Sweet pea diseases***Erysiphe polygoni*, control 7885*Ramularia deusta*, control 7885

virus, report, Australia 3831

Swertia decussata

glycosides 7115

organic acids 7115

sterols 7115

triterpenes 7115

Switzerland

damson, growing 5059

grapevine, growing, mechanization 5104

strawberry, economics 7519

Syagrus* spp., leaf, anatomy 3979**Sycophaga sycomor*, *Ficus sycomor*,**

pollinator 1811

***Sylepta semilugens*, cola pests, annual**

report, Nigeria 4035

Symphylites* spp., cacao pests 2444**Synanthedon Hector*, control, peach pests**

7448

S. pictipes*, peach pests 3477**S. tipuliformis***

black currant pests 6677

red currant pests 6677

Syngonium podophyllum*, diseases, *Erwinia*carotovora* 3915***S. spp.***

nutrition

annual report, USA 6129

major elements, plant, analysis 1376

minor elements, plant, analysis 1376

plant, composition, major and minor elements 1376

***Synsepalum* spp.**

nutrition, plant composition, analytical data 5539

propagation 787

Syrphidae*, predators on, *Macrosiphum pisi

1232

***Syrphus* spp.**

control

cucumber and gherkin pests 5222

Cucumis melo var. *flexuosus*, pests 5222predator on, *Brevicoryne brassicae*,

cabbage 8624

***S. vitripennis*, predator on, aphids, peach**

1022

***Syzygium jambos*, propagation, under mist**

5677

S. javanica*, propagation, under mist 5677**Tabernaemontana coronaria***

glycosides 9062

sterols 9062

T. spp.

growth substances

leaf

senescence

benzimidazole 8969

chlomequat 8969

GA 8969

IBA 8969

leaf

senescence

growth substances 8969

photoperiodism 8969

Taeniothrips vulgarissimus*, vectors, *Botrytis fabae*, bean (*Vicia*) pests 8708**Tagetes***

essential oil, content 7983

flowering

growth substances

GA 2217

TIBA 2217

photoperiodism, temperature 2217

temperature, photoperiodism 2217

growth studies, inoculation, *Penicillium simplicissimum* 2207

light

intensity

flowering 2217

interaction, photoperiodism 2217

photoperiodism

boron, deficiency, symptoms 5416

interaction

light, intensity 2217

temperature, 2217

seedling, raising, containers 2218

temperature, interaction, photoperiodism, 2217

weed control 2171

***Tagetes* diseases**

cucumber mosaic 7000

mosaic 8880

***Tagetes* growth substances**

flowering

GA 2217

TIBA 2217

interaction, boron nutrition, aminoazide 5416

Tagetes* leaf, composition, plant inoculation, *Penicillium simplicissimum* 2207**Tagetes* nutrition**

boron

deficiency

symptoms

correction, growth substances,

aminoazide 5416

photoperiodism 5416

nitrogen 6133

phosphorus 6133

Tagetes* root, exudate, composition, inoculation, *Penicillium simplicissimum* 2207**Tagetes* seed**

sowing, direct, in pots, pelleted 2165

treatment, pelleted 2165

***Tagetes* spp.**

annual report

Austria 347

USA 3836

flower, pigments, analytical methods 286

fungicides, injury, benomyl 1146

nematode population control 7300

ozone, injury 1322

Tagetes spp. contd.

- seed, germination 725
- seedling, production, temperature 276
- sulphur dioxide, injury 1322

Tamarind fruit, aroma 7171

- Tamarind pests, *Caryedon serratus*, Colombia 5666

Tamarix, growing, in containers, media 4689**Tamus communis, hydrocarbons 4775****Tanacetum spp.**

- carbon cycle 6319
- flower, glycosides, content 760

Tangelo

- enzyme activity, fruit abscission layer, growth substances, cycloheximide 2405

ethylene, fruit, pigments 4814**as a pollinator, tangor 9102****temperature, fruit, pigments 4814****Tangelo diseases, *Alternaria citri*, fruit storage 5574****Tangelo fruit**

- ethylene, production, growth substances, cycloheximide 2405
- loosening, growth substances, cycloheximide 2405

pigments, biosynthesis, ethylene, temperature 4814**Tangelo growth substances**

- enzyme activity, cycloheximide 2405

ethylene production, cycloheximide 2405**fruit, loosening, cycloheximide 2405****Tangor****pollination 9102****cross- and self-compared, fruit set 9102****Tangor fruit****-seed relationships, growth studies 9102****set, pollination 9102****Tangor seed****-fruit relationships, growth studies 9102****number, pollination 9102****Tannins****content****fruit****geographical location, apple 6600****seasonal variations, persimmon 2432****leaf, varietal differences, tea 7271****Tapajosa rubromarginata, biological control, sugar cane pests 5655****Taphrina deformans****control, peach diseases 7448****host enzyme activity, peach diseases 5771****peach diseases, annual report, German Federal Republic 6506****resistance, own-rooted plants, peach diseases 7443****Tapinanthus spp., growing on, cacao, annual report, Ghana 7177****Taraxacum spp.****as a salad crop 8817****weed control 8817****as weeds, lawns and sports turf 3892****Tarsonemus fragariae****control, strawberry pests 8516****strawberry pests 1075****T. pallidus, strawberry pests, annual report, German Federal Republic 5094****Taxonomy****chemotaxonomy****Aesculus spp. 8957****Angelica spp. 5519****Aster spp. 3857****Echinoideae 4727****Lindera spp 5498****mint 9000****ornamental plants 6233****Picea pungens 2983****vegetables 6233****cytotaxonomy 1700****Brunsvigia spp. 6182****Cyamopsis spp. 6858****Hibiscus spp. 4720****monocotyledons 3905****nerine 6182****ornamentals 266****enzymes****apricot 7419****Prunus mume 7419****essential oil****Myricaceae 9003****Taxonomy contd.****essential oil contd.****Rosa spp. 4714****flower****biology****Campsis × tagliabuana 320****Rosa spp. 4705****sapogenins, content, Dioscorea spp. 1454****stomata, number, lily-of-the-valley 6188****Tea****aerial, spraying, general, deposits 4111****alkaloids, metabolism 9279****aluminium, content, nitrogen nutrition 6457****amines, metabolism 9279****amino acids****content, plant 6462****metabolism 9279****annual report****Burundi 4031-4032****East Africa 8188****India 1657****Kenya 7264****Malawi 6454-6455****Sri Lanka 8262****arsenic, determination, neutron activation analysis 4108****breeding and selection 1659, 3262****caffeine****biosynthesis 4906****content, leaf, varietal differences 7271****structure 4114****calcium, content, root, nitrogen nutrition 8270****carbohydrates****content****post-prune growth 3283****pruning and training 8267****catechins****biosynthesis 3282****content****leaf****nitrogen nutrition 6466****varietal differences 7271****magnesium nutrition 3286****virus control 3290****cell wall, composition, leaf 6464****climate****Malawi 8264****microclimate 8264****clones 1660, 3262, 3288****drought resistance 5660****leaf composition 8278****pest resistance, *Xyleborus fornicatus* 4899****Tocklai 854****cover crops****Eragrostis spp., soil conservation 8269****plant nutrition 7267****Stylosanthes spp., soil conservation 8269****dormancy, root-shoot relationships 6461****enzyme activity****cations 4903****leaf 4904****development 5664****senescence 5664****plant, herbicides 8265****flavonols, biosynthesis 3282****fluorine, content, leaf 6465****fungicides, absorption, benomyl 6460****growing****Australia 2479, 9269****Burundi 3261****India 1661, 7265****grubbing, equipment 854****harvesting****mechanical****annual report, USA 1530****equipment 3285****time of, leaf quality 8277****herbicides****enzyme activity****monuron 8265****simazine 8265****leaf****tannins****content****monuron 8265****simazine 8265****photosynthesis****monuron 8265****simazine 8265****Tea contd.****herbicides contd.****respiration****monuron 8265****simazine 8265****toxicity****dicamba 2495****picloram 2495****hybrids, interspecific 6456****insecticides****residues****arsenic 3329****binapacryl 4898****dicofol 4898****dinocap 4898****leaf****BHC 4900****DDT 4900****plant, methomyl 2507****soil****BHC 4900****DDT 4900****iron, content, nitrogen nutrition 6457****irrigation****economics 856****requirements 429, 855****determination 856****magnesium, content, root, nitrogen nutrition 8270****manganese****content****nitrogen nutrition 6457****root, nitrogen nutrition 8270****as medicinal plants 6467****mulching****foliage, plant nutrition 7267****grass, disease incidence 5662****grass cuttings, soil conservation 8269****materials compared 7268****peat 3266, 9274****plastic, disease incidence 5662****prunings, plant nutrition 7267****rubber sheeting 3266, 9274****soil****conservation 8269****temperature 3266****phosphorus****content****leaf 8271****nitrogen nutrition 6457****plant, aluminium nutrition 6458****root, nitrogen nutrition 8270****translocation 4113****photoperiodism, shoot, growth 4901****photosynthesis****herbicides 8265****water relations 4112****pigments, content, leaf, storage 4116****plucking****methods 3284****shoot, growth 4905****potassium****content****nitrogen nutrition 6457****plant, aluminium nutrition 6458****root, nitrogen nutrition 8270****processing, leaf, chlorophyll content 3287****products and by-products 6467****saponins 6468-6469****seed cake 8048****seed oil 6468, 8048****pruning and training 3267, 3269****disease incidence, *Phomopsis theae* 5662****flower bud, initiation 3268****leaf bud, development 3268****mechanical, equipment 3285****methods compared 3270-3271, 7269, 8267****post-prune growth, starch content 3283****root growth 8268****time of 8266****young bushes 3272****quinones 4908****rainfall****leaf, quality 8279****microclimate 8264****shoot, growth 4901, 4905****replanting 854****respiration****herbicides 8265**

Tea contd.

- respiration *contd.*
 - leaf, nitrogen nutrition 3281
 - root, nitrogen nutrition 3281
- samples, harvesting, preparation and manufacture 1658
- sap, composition 4907
- shade 9271
 - disease incidence, *Phomopsis theae* 5662
 - nutrition, annual report, Kenya 7264
 - trees, establishment 9271
- spraying, aerial, general, deposits 4111
- stomata, movements, rainfall 8264
- tannins
 - content
 - leaf
 - nitrogen nutrition 6466
 - varietal differences 7271
- transpiration, water relations 4112
- water relations
 - growth studies 4112
 - physiology 4112
- weed control 2495, 4106, 5661, 8265, 9272-9274
 - drains 4896
 - mulching 7268
 - plant nutrition 7267
 - review 8120-8121

Tea diseases

- Calonectria kytensis* 4109
 - control 9278
- Cercospora* spp. 6459
- Colletotrichum camelliae*, NPK nutrition 4897
- Cylindrocarpum destructans* 430
- Cylindrocladium lanceolatum*, control 9278
- C. tenue*, control 9278
- Exobasidium vexans*, control 8272-8273
- incidence, environmental factors 9270
- Pestalozzia theae*, NPK nutrition 4897
- Phomopsis theae*
 - control, cultural methods 5662
 - fungicides, absorption 6460

Tea flower

- bud initiation 4902
- pruning and training 3268

Tea growth substances

- dormancy
 - breaking
 - GA 6461
 - kinetin 6461
- shoot, growth, GA 4901

Tea leaf

- amino acids, content, nitrogen nutrition 3289
- bacteria 1664
- bud development, pruning and training 3268
- carbohydrates, content, water relations 4112
- composition
 - clonal variations 8278
 - flavanols 6463
 - nitrogen nutrition 6466
 - seasonal variations 432
 - varietal differences 7271
- development, enzyme activity 4904
- flavanols, oxidation, biochemistry 1665
- phosphorus, content 4113
- pigments, nitrogen nutrition 3287
- quality
 - harvesting time 8277
 - nitrogen nutrition 9275
 - pruning and training 7269
- storage
 - controlled atmosphere 4115
 - pigments 4116
- tannins, content, herbicides 8265
- water, content, water relations 4112

Tea nutrition

- aluminium 6458
- boron 9277
 - general, leaf analysis, methods compared 3302
- green manures 9274
- magnesium
 - leaf, catechins, content 3286
 - yield reduction 9277
- manganese 9277
- molybdenum 9277
- nitrogen 7267, 9277

Tea nutrition *contd.*

- nitrogen *contd.*
 - disease development, *Phomopsis theae* 5662

- leaf
 - amino acids, content 3289
 - composition 6466
 - pigments 3287
 - nutrient availability 3274
 - phosphorus content 7267
- respiration
 - leaf 3281
 - root 3281
- sources
 - compared 6457, 8270, 9276
 - leaf quality 9275
 - nutrient absorption 6457
 - nutrient availability 3275
 - root composition 8270
 - root growth 8270
- NPK 3273, 6457, 9277
 - annual report, Sarawak 4036
 - disease incidence 4897
- phosphorus 4107, 7267, 8271
 - absorption 4113
 - aluminium nutrition 6458
 - placement 3276
 - sources, compared 7270
- potassium 1662, 3277-3278, 4107
 - absorption, aluminium nutrition 6458
 - deficiency, diagnosis 3277
 - disease development, *Phomopsis theae* 5662
 - leaf analysis 1662
 - sulphur, leaf analysis 3173
 - zinc 1663, 9277
- annual report, Rhodesia 4829

Tea pests

- Brevipalpus phoenicis* 4898
 - control 8274
- B. spp.* 5663
- ecological studies 9270
- insects, control, review 1532
- mites 3324
- nematodes, nursery soil treatment 431
- Niphadolepis alianta* 4110
- Parametriotes theae* 3280
 - control, cultural methods 3279
- Pratylenchus loosi* 3317
- Sparganothis pilleriana*, control, cultural methods 3279
- Tortrix politana*, control, cultural methods 3279
- Toxoptera aurantii*, control, cultural methods 3279
- Xyleborus fornicatus* 8275
 - clonal susceptibility 4899

Tea plant, composition, review 8276**Tea propagation**

- cuttings 1660, 3265
 - under hessian 8263
 - leaf removal 7266
 - media 2480
 - subsoil 4895
 - top-soil 4895
 - under plastic 8263
 - in plastic bags 8263
 - shoot, size 7266
 - soil, temperature 8263
 - treatment, growth substances 3264
- grafting 1660
- nurseries
 - management, India 1661
 - nutrition 3273

Tea root

- anatomy 3172
- composition, seasonal variations 432
- development, water relations 4112
- growth, pruning and training 8268
- nitrogen, content, nitrogen nutrition 3274
- phosphorus, content 4113
- shoot relationships, dormancy 6461
- systems, phosphorus, placement 3276

Tea seed

- germination
 - shade 3263
 - soil, amendments, compost 3263
- oil, composition 8048
- production 1660

Tea shade, seed, germination 3263**Tea shoot**

- composition, seasonal variations 432

Tea shoot *contd.*

- phosphorus, content 4113
- root relationships, dormancy 6461

Tea soil

- amendments, compost, seed germination 3263
- conservation 9270
- cover crops 8269
- mulching 8269
- cultivation
 - machines 3285
 - methods compared 9274
- erosion 9270
 - control
 - tropics
 - Eragrostis* spp. 8269
 - Stylosanthes* spp. 8269
- fumigation, nematodes, nurseries 431
- management, methods compared 9274
- temperature, mulching 3266

Tea varieties

- Florida 1659
- leaf
 - composition 7271
 - quality 8279
 - tannins, content 8279

Tecoma radicans*, alkaloids, content 2308**Tecophilaea* spp., tuliposides 8908*****Telenomus alecto*, parasite of, *Chilo enfuscatellus*, sugar cane 1641****Tellurium, toxicity, cucumber and gherkin 157****Temperate crops, fungicides, disease control,****copper, review 1694****Temperature (see also Frost)****anthocyanins, biosynthesis, cranberry****8498****bolting, leek 5300****boron, absorption, sugar cane 4102****bud****development****apple 1709****apricot 1709****cherry 1709****peach 1709****pear 1709****plum 1709****bud break****forecasting, apple 2592****grapevine 583****bulb, development, leek 5300****carbohydrates, content, okra 8749****celery 8815****chloroplast****number, spinach 4394****size, spinach 4394****corm, development, freesia 8891****disease incidence****azalea 6225****bulb storage, onion 7753*****Curvularia trifolii*, gladiolus 5423*****Leveillula taurica*, tomato 8781*****Peronospora destructor*, onion 3763, 4523*****P. parasitica*, cabbage 8622****disorder incidence****petal blueing, rose 7949****watercore, apple 8384****dormancy****breaking****artichoke, jerusalem 2749****fruit trees and plants 907****dwarfing, oleander 3932****essential oil, content, rose 5471****fatty acids, biosynthesis, cacao 3186****flower****development****azalea 2289****mango 3230****tomato 2132****malformation, mango 3230****number, rose 8953****quality, carnation 6968****sex, cucumber and gherkin 6832****size, rose 8953****flower bud****drop, peach 8461****initiation****alstroemeria 6990****azalea 2289****begonia 1356****caraway 6249****cauliflower and broccoli 6800**

Temperature contd.

- flower bud contd.
- initiation contd.
- eggplant 8762
 - Eucharis grandiflora* 8909
- iris 297
- Kalanchoe* spp. 3902
- okra 8749
- olive 818
- ornamentals 6200
- Schlumbergera* spp. 309
- statice 2940
- tulip 297
- flowering
- Aeschynanthus* spp. 7951
- alstroemeria 6990
- Asclepias* spp. 7952
- date
- carnation 6968
- Limonium* spp. 6996
- Eucharis grandiflora* 8909
- Euphorbia fulgens* 6237
- forecasting, apple 2592
- fruit
- acidity, grapevine 1081, 6725
- colour, tomato 8805
- composition, tomato 5369
- coumarins, content, *Ammi* spp. 782
- development, pear 6648
- of fruit, environmental factors, grapevine 7582
- fruit
- growth, apple 6597
- nitrogen, content, tomato 8805
- peel thickness, grapefruit 5548
- pigments
- biosynthesis, grapevine 3595
- orange 4814
- tangelo 4814
- quality, tomato 4566
- ripening, grapevine 6725
- set
- black currant 5803
- cacao 1549
- plum 8477
- time from flowering, grapevine 587
- tomato 5340
- shape, grapefruit 5548
- size, tomato 4566
- of fruit, transpiration, grapevine 7582
- fruit disorders, pear 1841
- fruiting, precocity, cucumber and gherkin 1995
- growth
- chrysanthemum 272
- under glass, cucumber and gherkin 2767
- lettuce 1973
- under plastic, cucumber and gherkin 2767
- tomato 3811
- growth studies
- lettuce 8610
- mushroom 6957
- growth substances, endogenous, cauliflower and broccoli 3667
- interaction
- growth substances
- oleander 3932
- orange 5572
- tissue culture, artichoke, jerusalem 8597
- light
- growth, bean (*Phaseolus*) 7716
- intensity
- lettuce 1973
- rose 6230
- photosynthesis, bean (*Phaseolus*) 7716
- tomato 2132
- nutrition, tomato 2132
- photoperiodism
- tagetes 2217
- begonia 1356, 6168
- lettuce 1975
- Malvaviscus arboreus* 5484
- onion 602
- ornamentals 6200
- rose 6230
- juvenility
- cauliflower and broccoli 7644
- ivy 6217
- latitude 5678

Temperature contd.

- leaf
- chlorophyll
- content
- mandarin and tangerine 6352
- tomato 5990
- of leaf, environmental factors, grapevine 7582
- leaf
- environmental factors, squash 6825
- phosphorus, content, pea 2060
- photosynthesis, tree fruits 7325
- of leaf, transpiration, grapevine 7582
- measurement
- microclimate, citrus 5549
- petiole, saintpaulia 2935
- soil 4127
- modification apparatus, fruit trees and plants 906
- nitrate accumulation, spinach 2746
- nutrient translocation, bean (*Phaseolus*) 2028
- phosphorus, metabolism, apple 7401
- photosynthesis
- bean (*Phaseolus*) 5984
- greenhouse crops 5683
- plant
- composition, essential oil, mint, annual report, USA 324
- development, lettuce 8611
- pollen tube, growth, pear 6648
- protein, biosynthesis, apple 50
- pruning and training, time of, apple 8368
- rainfall, correlation, fruit, yield, grapevine 562
- recording techniques, citrus, annual report, USA 790
- respiration
- celery 2901
- greenhouse crops 5683
- kohl-rabi 6799
- rhubarb 2901
- responses
- cyclamen 5421
- freesia 7898
- tomato 2133
- vegetables, annual report, Irish Republic 5150
- root
- development
- tomato 2882
- trees and shrubs, annual report, USA 3835
- growth
- begonia 6168
- leek 5300
- sugars, content, sugar cane, annual report, USA 9221
- seed
- development, pea 5274
- disorder incidence, pea 5274
- seedling emergence 4447
- seedling production
- annuals 276
- bedding plants 8843
- cineraria 8843
- petunia 8843
- pot plants 8843
- shoot
- development, tomato 2882
- growth
- apple 6597
- begonia 6168
- stomata
- mechanism, onion 1250
- movements, apricot 8426
- sucrose, content, sugar cane 404, 4088
- sugars, metabolism, pea 2058
- sums
- bean (*Phaseolus*) 2787
- disorder incidence, orange 807
- flowering
- black currant 4312, 5803
- date
- forecasting
- apple 4961
- fruit trees and plants 2379
- fruiting, date, forecasting, fruit trees and plants 2379
- grapevine 557
- macadamia 5590
- pollen, production, hazel 3454

Temperature contd.

- sunlight, flowering, date, grapevine 586
- transpiration
- apricot 8426
- pineapple 8174
- varietal behaviour
- apple 2540
- black currant 5803
- water relations
- apricot 8426
- sugar cane 4102
- tomato 7804
- winter hardiness, tree fruits, annual report, Canada 8314
- Tenuipalpus japonicus*, persimmon pests 821
- Tephrosia purpurea*, weeds controlled by, *Eupatoria odorata*, coconut 8140
- T. spp.*, pests, *Etiella zinckenella* 1422
- T. vogelii*
- growing 765
- economics 765
- Termites, tea pests, annual report, Sri Lanka 8262
- Tetradonema plicans*, parasite of, sciarid flies, mushroom 7836
- Tetragonia* spp., ozone, injury 4392
- Tetranychus arabicus*, seed, treatment, squash pests 630
- T. cinnabarinus*, seed, treatment, squash pests 630
- T. cucurbitae*, eggplant pests 1275
- Tetranychus lombardini*, banana pests 4835, 6388
- T. mcdanieli*, apple pests 46
- T. pacificus*
- biological control, peach pests 81
- grapevine pests 1920
- peach pests 81
- predator-prey relationships, grapevine pests 1920
- T. pieroei*, boron nutrition, oil palm pests 6411
- T. spp.*
- carnation pests, annual report, Denmark 3298
- control
- cucumber and gherkin pests 5222
- Cucumis melo* var. *flexuosus*, pests 5222
- gerbera pests, annual report, Denmark 3298
- grapevine pests, annual report, Belgium 3559
- T. telarius*
- acaricides
- resistance 18
- chrysanthemum pests 6974
- apple pests 5738
- annual report
- Australia 5693
- UK 8318
- bean (*Phaseolus*) pests 1216, 4383
- biological control, cucumber and gherkin pests 3685
- control
- apple pests 7391
- chrysanthemum pests 6973, 6975
- cut flowers, chrysanthemum pests 6976
- eggplant pests 7768
- fungicides, benomyl, bean (*Phaseolus*) pests 5253
- grapevine pests 7580
- damage, cold injury, raspberry pests 2684
- eggplant pests 4383
- garlic pests 228
- hop pests, annual report, German Federal Republic 7064
- integrated control
- cucumber and gherkin pests 7802
- hop pests 7093
- tomato pests 7802
- irrigation, peach pests 1820, 5033
- onion pests 228
- pear pests 455, 5738
- predators
- annual report, UK 8583
- Phytoseiulus persimilis*
- cucumber and gherkin pests 1193, 7687
- rose pests 4711

- Tetranychus telarius** *contd.*
 rose pests 4710, 4712, 8954
 strawberry pests
 annual report
 Belgium 1060
 Canada 2669
 UK 3552
 USA 6692
 varietal resistance
 strawberry pests 6694
 tomato pests 1291
 vegetables, pests 4539
- Tetraploid plants**, stomata, size, spinach 125
- Tetrastichus** spp., parasite of, *Thomasiniana theobaldi*, raspberry 2688
- Thalictrum aquilegifolium**
 glycosides
 biosynthesis 2208
 content 2209
- T. minus**, alkaloids 6320
- T. rugosum**, alkaloids, content 2370
- Thecla basileides**, pineapple pests 6417
- Theobroma** spp., breeding and selection 4838
- Thielaviopsis basicola**
 bean (*Phaseolus*) diseases 5255
 cherry diseases, annual report, UK 8318
 cyclamen diseases, annual report, Netherlands 6126
- T. paradoxa**, pineapple diseases 9201
- T. spp.**
 pineapple diseases 3249
 valerian diseases 8047
- Thomasiniana oculiperda**, apple pests 2582
- T. theobaldi**
 integrated control, raspberry pests 2688
 parasites, *Tetrastichus* spp., raspberry pests 2688
- Thrips angusticeps**, pea pests, annual report, UK 3611
- T. flavus**, vectors, *Botrytis fabae*, bean (*Vicia*) pests 8708
- T. florum**, varietal resistance, banana pests 381
- T. imuginis**, apple pests, annual report, Australia 5693
- T. spp.**, biological control, cucumber and gherkin pests 5051
- T. tabaci**, leek pests 662
- T. tabaci**
 biological control, cucumber and gherkin pests 3685
 control
 cucumber and gherkin pests 5222
 Cucumis melo var. *flexuosus*, pests 5222
 onion pests, annual report, Australia 5882
 seed, treatment, squash pests 630
- Thuja** spp.
 dormancy, phosphorus, absorption 3909
 growing, in containers, media 4689
 phosphorus, absorption, dormancy 3909
- Thyme**
 essential oil 4738
 determination 7991
 volatile constituents 1414
- Thyridomyia** spp., pollinator, cacao 5612
- Tigridia** spp.
 seed
 composition 2943
 oil 2943
- Tillandsia** spp.
 photosynthesis 305
 trichome, anatomy, morphology 6199
- Tissue culture**
 alkaloids
 biosynthesis
 growth substances
 Datura spp. 2333
 Rauwolfia spp. 2333
 Scopolia spp. 2333
 production
 Atropa belladonna 6287
 Catharanthus roseus 7102
 Datura spp. 1439, 3969
 fenugreek 4778
 Rauwolfia spp. 5531
 anther
 growth substances, treatment, asparagus 8735
 haploid plants, tomato 4582
- Tissue culture** *contd.*
 anther *contd.*
 lily 292
 ornamental plants, annual report, UK 3832
 propagation, cauliflower and broccoli, annual report, Italy 6771
 vegetables, annual report, UK 3612
 apices, cymbidium 311
 axillary buds
 growth substances, treatment, iris 5425
 media, iris 5425
 bud
 apple 1779
 capsicum 5326
 bulb scales, lily 731
 callus
 alkaloids, biosynthesis, *Datura* spp. 9035
 apple, carbon sources 972
 chlorophyll
 biosynthesis, orchids 7029
 content, *Ruta* spp. 9053
 metabolism, *Ruta* spp. 9053
 coumarins, biosynthesis, *Ruta* spp. 9051
 cyanide toxicity
 peach 4260
 Prunus besseyi 4260
 P. tomentosa 4260
 Datura spp., melanogenesis 1433
 grafting compatibility studies, fruit trees and plants 3567
 growth substances, treatment, *Datura* spp. 9036
 media, chrysanthemum 2927
 media analysis, *Apocynum cannabinum* 2345
 pigments, biosynthesis, orchids 7029
 quinones, *Cassia angustifolia* 9027
 sugar cane 4087
 terpenes
 content, *Ruta* spp. 9053
 metabolism, *Ruta* spp. 9053
 tissue analysis, *Apocynum cannabinum* 2345
 cambial tissues, propagation, salinity tolerance, carrot 8812
 cambium, growth inhibition, phenolic compounds, cherry 8442
 capitulum, pyrethrum 9012
 cell suspension
 antimicrobial activity, hemp (*Cannabis*) 9025
 carbon dioxide requirements, rose 8955
 carrot 1306, 7819
 cell aggregation, rose 8956
 choline, hemp (*Cannabis*) 9025
 fatty acids
 metabolism
 Atropa belladonna 8591
 bean (*Phaseolus*) 8591
 carrot 8591
 hemp (*Cannabis*) 8591
 Ipomoea spp. 8591
 glycosides, biosynthesis, parsley 8983
 growth studies, *Pogostemon* spp. 7083
 growth substances, treatment, rose 8956
 media, sugar cane 2476
 media analysis, *Apocynum cannabinum* 2345
 media pH, rose 8955
 nutrient absorption, *Pogostemon* spp. 7083
 parsley 4732
 phenolic compounds, hemp (*Cannabis*) 9025
 pigments, biosynthesis, rose 1394–1395
 sugar cane 403
 sugars, metabolism, bean (*Phaseolus*) 2805
 tissue analysis, *Apocynum cannabinum* 2345
 cells, enzyme activity, carrot 694
 chloroplasts
 bean (*Vicia*) 128
 spinach 128
 cotyledons
 cucumber and gherkin 163
 growth substances, pumpkin 2780
- Tissue culture** *contd.*
 cotyledons *contd.*
 lettuce 139
 pumpkin 5229
 radish 1181, 6804
 sucrose treatment, radish 153
 cytokinin activity, pea 6017
 diseased leaves, cucumber and gherkin 2004
 embryo
 apple 2591
 citrus 1471
 coffee 8155
 endosperm tissue, *Citrus junos* 7127
 exudates, pea 4499
 growth substances
 metabolism, bean (*Phaseolus*) 2803–2804
 treatment
 citrus 6333
 Protea spp. 6243
 holly 4692
 media
 apple 2546
 cherry 7432
 citrus 6333
 lemon 3142
 pear 2546
 oil palm 1605
 peach 5772
 pear 2591
 propagation
 cherry 8431
 date 8106
 stone fruits 7313
 temperature, cherry 7427
 embryogenesis
 Citrus spp. 8087
 oxygen concentration, carrot 4593
 flower
 growth substances, treatment, *Haworthia* spp. 2271
 Haworthia spp. 2271
 media, *Haworthia* spp. 2271
 flower bud
 growth substances, aquilegia 3856
 petunia 8872
 fruit cells, lemon 1496
 growth chambers, design 873
 growth substances, determination, *Viscaria candida* 7026
 hypocotyl, pumpkin 5229
 leaf
 beetroot 1150
 chloroplast, number, spinach 4394
 growth substances
 treatment
 petunia 7871
 Streptocarpus spp. 7890
 herbicides, treatment, sugar cane 7253
 media
 Epidendrum spp. 6207
 Laeliocattleya spp. 6207
 mother plant treatment, *Streptocarpus* spp. 7890
 photosynthesis, measurement, cucumber and gherkin 4457
 pigments
 biosynthesis, hydrangea 7055
 degradation, cucumber and gherkin 4459
 potassium
 absorption, bean (*Phaseolus*) 8697
 metabolism, bean (*Phaseolus*) 7711
 propagation
 cauliflower and broccoli, annual report, Italy 6771
 chicory 3638
 Rauwolfia spp. 351
 rhubarb 5318
 rubidium, absorption, bean (*Phaseolus*) 8697
 sodium, absorption, bean (*Phaseolus*) 8697
 temperature, *Streptocarpus* spp. 7890
 leaf abscission layer, ethylene treatment, bean (*Phaseolus*) 5259
 leaf cells, callus formation, asparagus 8734
 media, *Datura* spp. 1439
 meristem
 apple 4184

Tissue culture *contd.*meristem *contd.*

- asparagus, annual report, Belgium 1131
- bulbs, annual report, UK 3874
- molybdenum treatment, carnation 717
- nitrogen treatment, carnation 717
- ornamental plants
 - annual report
 - Belgium 5386
 - Italy 6960
- strawberry
 - annual report
 - Belgium 5071
 - Netherlands 5073
- virus-free plants, grapevine 7554

mesocarp

- carbon dioxide, treatment, peach 4261
- ethylene, treatment, peach 4261
- growth substances, treatment, peach 4261

- mutation induction, sugar cane, annual report, USA 9221

nucellus

- citrus 1471
- growth substances, treatment, citrus 6333

- media, citrus 6333

- ovary, cucumber and gherkin 3693

- petals, *Impatiens* spp 284

- pistil, antirrhinum 8873

pith

- herbicides, treatment, sugar cane 7253
- xylem formation, growth substances, lettuce 7635

pollen

- antirrhinum 8873
- Atropa belladonna* 9022
- lily 1363
- ornamentals 707
- petunia 6153
- tomato 6929

polyembryony induction

- Ammi* spp. 1447
- Ilex* spp. 3911

protocorm

- growth substances, treatment, *Cymbidium* spp. 6205
- media, *Cymbidium* spp. 6206
- propagation, *Cymbidium* spp. 8935

protoplast

- petunia, callus formation 6154

root

- aging, media, tomato 5360
- alkaloids, biosynthesis, tomato 2129
- carrot 259-260, 1307, 6945
- enzyme activity 2140
- cell, division, growth substances, radish 3673
- coumarins, biosynthesis, *Ruta graveolens* 9052
- electrical activity, pumpkin 5224
- enzyme activity, carrot 694
- Epidendrum* spp. 4683
- growth substances
 - treatment
 - pea 6010
 - radish 5940
 - vegetables 2073
- media, *Atropa belladonna* 6287
- nutrient absorption
 - growth substances
 - beetroot 1956
 - swede 1956
 - inhibition, beetroot 5171
- oil palm 2458
- pea
 - composition 658
 - meristem structure 658
 - respiration
 - carrot 4592
 - salinity, carrot 6944
 - senescence, radish 5940
- root callus, bud formation, chicory 8602
- root discs, beetroot 123
- saponins, production, extraction methods, *Dioscorea* spp. 6296
- seed callus
 - media, fenugreek 4778
 - vitamin B, treatment, fenugreek 4778
- shoot
 - apple 2552
 - black currant 2552

Tissue culture *contd.*shoot *contd.*

- electrical activity, pumpkin 5224
- enzyme activity, asparagus 6020
- fusicoccin
 - treatment
 - media pH, pea 8727
 - respiration, pea 8728
- grapevine 1930, 2552
- growth substances
 - concentration, root development, *Prunus* spp. 4240
 - treatment
 - media pH, pea 8727
 - pea 6868
 - petunia 7871
 - respiration, pea 8728
- light, *Cymbidium* spp. 2272
- media
 - calamondin 3103
 - Cymbidium* spp. 2272
- phenols, metabolism, root development, *Prunus* spp. 4240
- red currant 2552
- root development, *Prunus* spp. 4240
- shoot-tip
 - carnation 2919, 2923
 - chrysanthemum 1331, 2184
- growth substances
 - treatment
 - apple 3419
 - oil palm 1604, 6413
- herbicides, treatment, sugar cane 7253
- leaf bud development, pea 2064
- lily 731
- media
 - gladiolus 7005
 - oil palm 6413
 - orchid 1380
 - propagation, date 8106
 - virus control, hydrangea 7054
 - virus-free plants, grapevine 7554
- stem
 - growth substances
 - treatment
 - asparagus 2080
 - carnation 7849
 - media, asparagus 2080
- stem cells, rose 319
- tissues
 - growth substances, treatment, carrot 8813
 - light, carrot 8813
 - media
 - carrot 8813
 - Catharanthus roseus* 7102
 - photosynthesis, carrot 8813
- tuber
 - amino acids, metabolism, artichoke, jerusalem 7620
 - artichoke, jerusalem 6786
 - growth substances
 - artichoke, jerusalem 8599
 - treatment, artichoke, jerusalem 8597
 - phytochrome, metabolism, artichoke, jerusalem 7620
 - root development, artichoke, jerusalem 8600
 - sterols, biosynthesis, artichoke, jerusalem 1960
 - temperature, artichoke, jerusalem 8597
 - xylem, formation, artichoke, jerusalem 3631
- tuber slices, artichoke, jerusalem 130-131
- vegetables 121

- Tithonia* spp., seed, germination 725

Tomato

- amides, degradation, *Phoma destructiva* 4573
- amino acids
 - content, root, cobalt nutrition 8772
 - degradation, *Phoma destructiva* 4573
 - determination, paper chromatography 8807
 - metabolism 255
- annual report
 - Australia 5882, 6769, 7596
 - Austria 114
 - Belgium 1131, 4363
 - Canada 1944, 2734, 5883
 - Cyprus 3604
 - German Federal Republic 7597-7598

Tomato *contd.*annual report *contd.*

- India 3607
- Irish Republic 1939, 5150
- Israel 3608
- Italy 6771
- Malawi 8580
- Netherlands 1135, 5151, 6772, 8581
- New Zealand 5152
- Sabah 8582
- St. Lucia 8577
- UK 1937, 3610, 3612-3613, 4366, 5149, 5154, 5884-5885, 6774, 8583-8584
- USA 1130, 1935, 3618, 4368, 7601, 8585
- Zambia 8587
- ascorbic acid
 - content
 - humic acid 684
 - ripening 8806
- breeding and selection 5333
- annual report, USA 3616
- disease resistance 2859
- Cladosporium fulvum* 2111
- Fusarium oxysporum* f. *lycopersici* 2111
- Phytophthora infestans* 6900
- P. spp.* 672
- Pyrenochaeta lycopersici* 2109
- virus 2916
- Xanthomonas vesicatoria* 2110
- early fruiting 6054
- fruit
 - acidity 2892
 - colour 257
 - set 2133
- F₁ hybrids, annual report, USA 3617
- haploid clones 6929
- herbicide tolerance 4549
- pest resistance 2859
- Drosophila* spp. 5335
- report, USA 1940
- seed, germination time 4556
- bromine
 - content
 - fruit, soil fumigation, methyl bromide 8789
 - leaf, soil fumigation, methyl bromide 8789
- cadmium, determination 4389
- calcium
 - content
 - plant 8702
 - diseases 7798
- carbohydrates
 - biosynthesis, storage 8803
 - metabolism, diseased plants 3803
- carbon dioxide
 - supplementary
 - fruit
 - quality 4566
 - size 4566
 - seedling raising 2880
- chlorine, translocation 2126
- chlorophyll
 - biosynthesis, storage 8803
 - content
 - iron nutrition 7789
 - leaf
 - herbicides 6926
 - soil salinity 6926
 - plant nutrition 6077
 - temperature 5990
- chloroplast, proteins, content, zinc deficiency 4564
- cold, resistance, growth substances 6100
- cytology, vegetative apices, floral apices, petals 2855
- darkness
 - nitrogen, content 5356
 - nucleic acids, content 5356
 - plant, nutrition 5356
- drought 2474
 - leaf, composition 2474
- electric current
 - growth, stimulation 688
 - plant, weight 688
- enzyme activity 7796
- diseased plants 1296, 3788, 6084-6085
- Fusarium oxysporum*, f. *lycopersici* 7796
- Pythium* spp. 8791

Tomato *contd.*

- enzyme activity *contd.*
 - fertilizers, algae 6098
- fruit 256
 - development 5664
 - organic acids, metabolism, tissue culture 1298
 - ripening 88, 5362, 5366, 5664, 8793
- growth substances 5361, 8799
- humic acid 684
- iron, deficiency 7789
- leaf
 - determination 5897
 - development 5362
 - growth substances 6102
 - light intensity, disease resistance 4575
- nutrient deficiency diagnosis 1145
- plant
 - herbicides 6926
 - soil salinity 6926
- root 8792
- shoot 2127
- soil salinity 8778
- enzymes
 - characterization, seed, heterosis 3810
 - fruit 2883
 - inhibitors, wounded leaves 8790
- ethylene, production, fusaric acid 5358
- flooding 2474
 - leaf, composition 2474
- flowering
 - date
 - growth substances 6093
 - plant nutrition 8773
 - growth substances 7807
 - temperature sums 5340
- fluorine, toxicity, calcium nutrition 6932
- frost, protection, foam 8768
- fruiting
 - date
 - plant nutrition 8773
 - pruning and training 7780
- fungicide and insecticide mixtures, injury 1288
- fungicides
 - application
 - general, adjuvants 5686
 - methods compared, benomyl 6919
 - wax coatings
 - captan 6105
 - Dithane M45 6105
 - sodium *o*-phenyl phenate 6105
 - thiram 6105
 - residues
 - determination, quintozene 3331
 - leaf, streptomycin 2125
 - translocation
 - Terrazole 6086
 - thiabendazole 6086
- glycosides
 - content
 - growth substances 8794
 - nitrogen nutrition 8794
- growing
 - Bulgaria 1278, 3620–3621
 - frames 2737
 - under glass 1139
 - annual report, UK 6773
 - artificial illumination 877
 - economics 5156–5157
 - Netherlands 2105
 - fruit, composition 4565
 - heating, infra-red 4134
 - labour requirements 5156–5157
 - leaf, composition 4565
 - pest control 3627
 - in greenhouses 5332, 7604
 - glass, plastic 2738
 - Hungary, for processing 7778
 - as an intercrop, pineapple 9198
 - Italy, for processing 6901
 - mechanical harvesting 2889
 - media
 - coal dust 7604
 - compared 7604–7605
 - peatlite mix 6063
 - Netherlands, disease incidence 6087
 - outdoor and greenhouse compared 1302, 4579
 - peat 7604–7605, 7786
 - nutrition 1284
 - calcium 6076

Tomato *contd.*

- growing *contd.*
 - peat *contd.*
 - nutrition *contd.*
 - minor elements 4382
 - molybdenum 7628
 - recommendations 608
 - review 7783
 - steaming 1284
 - perlite 8773
 - under plastic 679, 2499
 - annual report, UK 6773
 - fruit, composition 4579
 - in plastic tubes, perlite 7781
 - in pots 2115
 - protected cultivation 2159, 5159
 - Scotland 5332
 - straw bales 1142
 - troughs 6910
 - Tunisia 4369
 - tunnels
 - plastic 5166
 - water conservation 3799
 - wax paper 2113–2114
- growth
 - seed, size, shape, position in fruit 6061
 - temperature 3811
- growth studies
 - inoculation, *Fusarium* spp. 6038
 - temperature 2882
- harvesting
 - mechanical 2889
 - equipment 2888, 3819
 - planting, spacing 239
 - once-over 1282, 4584
 - time of, nitrogen nutrition 6910
- herbicides
 - application, irrigation 6905
 - determination 7777
 - enzyme activity, pentanochlor 6926
 - injury
 - bensulide 6904
 - chlorambenmethyl 6904
 - humidity, diphenamid 3797
 - light intensity, diphenamid 3797
 - metabromuron 7776
 - pebulate 6904
 - potassium azide 6068
 - trifluralin 8770
 - plant, composition 6067
- residues
 - diquat 6905
 - fruit, vernolate 1698
 - paraquat 6905
 - respiration, 2,4-DNP 6922
- responses
 - DCPA 2867
 - trifluralin 6066
- testing 252
- tolerance
 - dinitroanilines 1267
 - diphenamid 4549
- humates
 - media constituent
 - nutrient solutions 8774
 - soil 8774
- humidity, relative, disease incidence, *Leveillula taurica* 8781
- hybrids
 - disease resistance, *Phytophthora* spp. 672
 - seed, germination 4556
- insecticide and fungicide mixtures, injury 1288
- insecticides
 - application, methods compared 4576
 - injury 2123
 - carbamates 2742
 - carbaryl 1288
 - Cygon 4576
 - DS-15647 4576
 - Furadan 4576
 - methidathion 3808
 - naled 2122
 - persistence, Temik 4577
 - residues 3328
 - aldicarb 1292
 - arsenic 3329
 - determination, monocrotophos 7302
 - endosulfan 2124
 - fruit
 - DDT 8787
 - dieldrin 8787

Tomato *contd.*

- insecticides *contd.*
 - residues *contd.*
 - fruit *contd.*
 - dimethyl phosphoroamidothioate 8788
 - plant 7777
 - determination 3330
- iron, absorption, leaf, surfactants 4562
- irradiation
 - gamma rays
 - fruit, ripening 4580
 - injury, reduction, algal extracts 6097
 - plant, height 4580
- irrigation 3308
 - drip 3624
 - furrow 6070
 - requirements 1293, 2118, 6070
 - for processing 7778
 - salinity problems 4376
 - soil, amendments 7784
 - sprinkler 437, 3624, 4376, 6070
 - trickle 4376
 - water, composition 5163
- lead
 - determination 4389
 - residues 4936
- light
 - coloured
 - disease resistance 4575
 - enzyme activity 4575
 - duration, leaf, senescence, amino acids, content 1297
 - far red, photosynthesis 7806
 - infra-red
 - fruit
 - colour 8797
 - ripening 8797
 - intensity
 - disease resistance 4575
 - enzyme activity 4575
 - flower, development 2132, 6931
 - nitrogen nutrition 6908–6909
 - plant composition 6064
 - potassium nutrition 6908–6909
 - red, photosynthesis 7806
 - supplementary, seedling raising 2880, 6096
 - ultra-violet
 - fruit
 - colour 8797
 - ripening 8797
- magnesium, content, plant 8702
- manganese
 - content
 - leaf
 - iron nutrition 7789
 - soil sterilization 240
 - plant
 - nitrogen nutrition 4563
 - soil steaming 8606
- mulching 1282
 - paper 6071
 - disease incidence 4570
 - plastic coated 4559
 - wax coated 4559
 - plastic 4377, 6071, 7779
 - annual report, Netherlands 1132
 - disease incidence 4570
 - weed control 3798
 - sawdust 7779
- mutagens
 - dimethylsulphate 7769
 - N-nitrosomethylurea 7769
- mutants
 - ethylene requirements 3814
 - induction 2857, 5334
- nematicides, pest population increase, aldicarb 7800
- nitrite, toxicity 5893
- nitrogen
 - content
 - plant
 - potassium nutrition 6909
 - seasonal variations 6909
- nucleic acids
 - biosynthesis, plant, salinity 6927
 - content, plant, salinity 6927
- nutrient absorption
 - growth substances 6094
 - nutrient solution 8774
 - pest incidence, *Meloidogyne* spp. 2878

Tomato contd.

- nutrient absorption *contd.*
 - soil, amendments 8774
- organic acids
 - content
 - growth substances 5361
 - iron nutrition 7789
- packing
 - plastic bags
 - fruit
 - pigments 2136
 - ripening 2136
- pectins, content, organic acids from peat 6072
- phosphates
 - metabolism, humic acid 684
 - translocation, curly top virus 1294
- phosphorus
 - absorption, pest incidence, *Meloidogyne* spp. 2878
 - content, plant, diseases 3804, 7798
 - translocation, pest incidence, *Meloidogyne* spp. 2878
- photoperiodism 2881
 - flower bud, initiation 6925
 - growth 6925
- photosynthate, translocation 6095
- photosynthesis
 - diseased plants 6095
 - far red light 7806
 - fruiting relationships 4579
 - nitrogen nutrition 6907
 - phosphorus nutrition 6907
 - physiology 4578
 - red light 7806
 - soil moisture 6092
- physiology 869
- pigments
 - biosynthesis
 - storage 8803
 - temperature 241
 - content, plant nutrition 6077
- planting
 - v direct sown, economics 3795
 - high density 6902
 - plant, size 2115
 - spacing 676, 3794, 5240
 - fruit, number 1282
 - harvesting, mechanical 239
 - time, India 677
- pollen
 - germination
 - calcium nutrition, fluorine toxicity 6932
 - fluorine toxicity, calcium nutrition 6932
 - viability, seed, treatment, irradiation, gamma rays 245
- pollination
 - artificial, methods compared 5363-5364
 - mechanical, methods compared 1301
- potassium
 - content
 - leaf, nitrogen nutrition 6910
 - plant 8702
 - diseases 7798
- products and by-products, juice 4583
- proteins
 - biosynthesis, nitrogen nutrition 249
 - content, chloroplast, zinc 4564
 - determination, paper chromatography 8807
- pruning and training 2856, 7780
 - disease incidence, *Pseudomonas solanacearum* 4568
 - fruit, size 7780
 - methods compared 6906
 - topping 8771
 - trellis 6906
- rainfall
 - disease incidence, *Alternaria* spp. 5166
 - protection, plastic 5166
- respiration
 - fruit
 - gamma rays 1504
 - storage 2744
 - herbicides 6922
 - humic acid 684
 - leaf, zinc nutrition 6080
 - potassium nutrition 1295
 - zinc nutrition 6922

Tomato contd.

- rhizosphere
 - micro-organisms
 - phosphorus nutrition 8620
 - population, cobalt 8772
- salinity
 - nucleic acids
 - biosynthesis 6927
 - content 6927
- seedling
 - growth, soil, temperature 678
 - production 2115, 8767
 - in greenhouses, plastic, economics 5339
 - nutrition 6908-6909
- raising
 - bare-root method 4557
 - carbon dioxide, supplementary 2880
 - light, supplementary 2880, 6096
 - media 4557
 - under plastic 3796, 5338
 - pots 4557
 - made from plastic films 2865
 - soil blocks 4557
 - storage 2863
 - transport, containers, plastic 4375
- sodium, translocation 2126
- soilless culture
 - annual report, France 3605
 - container volume 682
 - iron, sources 2845
 - media 6063
 - re-use 6924
 - sawdust 1285
 - nutrient solution
 - addition, humates 8774
 - concentration 682, 5215
 - mineral fertilizers 6075
 - salinity 6912
- spraying
 - aerial 2876
 - fungicide and insecticide mixtures, injury 1288
- staking, wire mesh cages 2868
- stomata
 - movements, growth substances 6093
 - number, soil salinity 8778
- storage
 - controlled atmosphere
 - disease incidence 1287
 - fruit, ripening 6103, 8803
 - hypobaric 6104
 - hypobaric system 1705
 - dips, application, methods compared 6105
 - temperature
 - disease incidence 1287
 - fruit
 - colour 7809
 - composition 7809
 - firmness 7809
 - weight loss 7809
 - respiration 2744
- sugars
 - content, growth substances 5361
 - determination, fruit, methods compared 2137
- temperature
 - disease incidence, *Leveillula taurica* 8781
 - flower, development 2132
- fruit
 - colour 8805
 - composition 5369
 - nitrogen, content 8805
 - quality 4566
 - set 5340
 - size 4566
 - growth 3811
 - leaf, chlorophyll, content 5990
 - responses 2133
 - root, development 2882
 - shoot, development 2882
 - sums, flowering 5340
 - water relations 7804
- tissue culture
 - anther, haploid plants 4582
 - pollen 6929
 - root
 - aging, media 5360
 - anaerobic conditions 6930
 - growth substances, treatment 2073
 - toxins, fusiococcin, plant responses 5353

Tomato contd.

- translocation, studies, excised roots 7805
- transpiration
 - anti-transpirants 6093
 - evapo-, seasonal variations 5354
 - toxins, fusiococcin 4478
- vitamins, content 3339
- water, movement, excised roots 7805
- water potential, leaf, diseases, *Fusarium* spp. 6923
- water relations
 - blossom-end rot 7790
 - growth substances 6100, 6102
 - pigment, content 254
 - plant, seed treatment 6062
 - soil relationships 7782
 - temperature 7804
- weed control 680-681, 1947-1948, 2078, 2116-2117, 2866, 3798, 4558, 5341-5343, 5680, 6066, 6068-6069, 6777-6778, 6903-6904, 7775-7776, 8588, 8769-8770
 - review 6065
- yearbook, USA 2853
- Tomato diseases 3319**
 - Agrobacterium radiobacter*, biological control 443
 - Alternaria solani*, -nematode complex 2877
 - A. spp.
 - incidence, Nigeria 5166
 - varietal resistance 4553, 6055
 - aubuca mosaic, host-pathogen relationships, growth substances 3815
 - bacterial soft rot, disease incidence 1287
 - big bud, control, cross protection 5349
 - Botrytis cinerea* 6917
 - control 8779
 - host enzyme activity 1296
 - nitrogen nutrition 5345
 - potassium nutrition 5345
 - bushy stunt
 - annual report, UK 4365
 - host phosphorus, content 3804
 - Cladosporium fulvum* 2875, 4552
 - host reactions 5355
 - resistance 2111, 2859
 - varietal resistance 675, 1280, 3792, 7772
 - Colletotrichum coccodes*
 - host-pathogen relationships 4569
 - nematode complex 8782
 - varietal resistance 2107
 - C. dematium*
 - pathogenicity 8515
 - varietal resistance 2107
 - C. destructivum*, varietal resistance 2107
 - C. fragariae*, varietal resistance 2107
 - C. gloeosporioides*, varietal resistance 2107
 - C. spp., aerial spraying, v ground spraying 2876
 - Corynebacterium michiganense*
 - auxotrophic mutants 6915
 - control, cross protection 6916
 - resistance 2859, 6916
 - breeding and selection 2872
 - survival on plant debris 2874
 - cucumber mosaic virus, resistance 2859
 - curly top
 - host carbohydrates, metabolism 3803
 - varietal resistance 2871, 4551
 - curly top virus
 - phosphates, translocation 1294
 - photosynthate translocation 6095
 - photosynthesis 6095
 - Didymella lycopersici* 6083
 - Erwinia ardoeae*, varietal resistance 2873
 - E. spp., control 8780
 - Fusarium oxysporum*
 - f. *lycopersici* 6919
 - control 6086, 8482, 8779
 - greenhouse disinfection 7795
 - host enzyme activity 6084-6085, 7796
 - host-pathogen relationships
 - growth substances 3815
 - phenols, production 2120
 - host phenols, content 3805
 - infection studies 6918
 - mulching 4570
 - resistance 2111, 4571-4572, 7797

Tomato diseases contd.

- Fusarium oxysporum* contd.
 - f. lycopersici* contd.
 - soil, fumigation 4570
 - soil fumigation 7795
 - soil sterilization 7795
 - tolerance 7797
 - varietal resistance 2860, 3792, 6057-6058
- F. spp.*
 - incidence 6327
 - resistance 2859
 - varietal resistance 675, 2858, 5337, 8765
 - water potential 6923
- general, economics, USA 2854
- Glomerella cingulata*, varietal resistance 2107
- leaf curl 5346
 - vectors
 - Bemisia tabaci* 8786
 - control 8786
- legume little leaf, control 278
- Leveillula taurica*
 - relative humidity 8781
 - temperature 8781
- mosaic, control, cross protection, by tobacco mosaic, annual report, Irish Republic 6770
- Olpidium brassicae*, vectors, tobacco necrosis 8651
- pea mild mosaic 4502
- Phoma destructiva*
 - host ascorbic acid, content 6106
 - host-pathogen relationships
 - amides 4573
 - amino acids 4573
 - host sugars, content 6106
 - incidence 1289
- Phytophthora infestans*
 - alternative hosts 3806
 - bacterial fertilizers 6074
 - enzyme activity, fruit 2891
 - fruit composition 2891
 - nitrogen nutrition 5345
 - varietal resistance 3787, 6900
- P. nicotianae* 6087
- P. parasitica*, annual report report, Canada 3603
- P. spp.*
 - host enzyme activity 3788
 - hybrid resistance 672
 - resistance 3788
- Pleospora herbarum* 242
- Pseudomonas fluorescens* 5247
- P. solanacearum*
 - incidence 4568
 - varietal resistance 7770
- P. spp.*, annual report report, Canada 3603
- Pyrenochaeta lycopersici*
 - control 8779
 - nutrient absorption 7798
 - varietal resistance 2109
- Pythium aphanidermatum* 4574
- Pythium myriotylum*, magnesium nutrition 2205, 5412
- P. spp.*
 - control 6920
 - host enzyme activity 8791
- Rhizoctonia solani* 4574
 - control 8779-8780
 - nematode complex 8782
- Sclerotium rolfsii*, control 8780
- Septoria lycopersici*
 - host enzyme activity 4575
 - resistance 4575
- spotted wilt, report, Australia 3602
- Stemphylium botryosum*, fruit storage 6936
- S. consortiale*, fruit storage 6936
- S. solani* 1288
- tobacco mosaic 241, 5347, 6914
 - boron nutrition 6913
 - control
 - cross protection 2119, 5348
 - inoculation 7792-7793
 - host-pathogen relationships 2108
 - resistance 2859, 3789
 - transmission, root infection 6082
 - varietal resistance 8765
- tobacco necrosis 8651
- Verticillium albo-atrum* 5350

Tomato diseases contd.

- Verticillium albo-atrum* contd.
 - control 6086
 - host enzyme activity 8691
 - nematode relationship 243
 - resistance, enzyme activity 8691
 - varietal resistance 7799
- V. dahliae*, host-parasite relationships 3325
- V. spp.*, varietal resistance 5337
- virus, resistance, breeding and selection 2916
- Xanthomonas campestris* 5247
- X. phaseoli* 5247
- Xanthomonas vesicatoria* 180, 5247
 - host reactions 7794
 - resistance 2110
- yellow leaf curl, vectors, *Bemisia tabaci* 3808
- Tomato disorders**
 - blossom-end rot 6081, 7790
 - fruit, composition 3820
 - incidence 3799
- Tomato flower**
 - bud initiation 1300, 3816
 - growth substances 7807
 - light 6925
 - photoperiodism 6925
 - plant nutrition 8773
 - development 3816
 - light, intensity 2132, 6931
 - plant nutrition 6931
 - temperature 2132
 - morphology, growth substances, GA 2884
 - removal
 - fruit
 - ripening 2131
 - size 2131
- Tomato fruit**
 - acidity 2890, 2892
 - nitrogen nutrition 6910
 - varietal differences 5369
 - amino acids
 - content 6834
 - metabolism, ripening 8800
 - sugars, content 8667
 - anatomy 2106
 - aroma 5368
 - ascorbic acid
 - content
 - fertilizers, algae 6098
 - growth substances 6094
 - mutagens 7769
 - nitrogen nutrition, soilless culture 2845
 - Phoma destructiva* 6106
 - Phytophthora infestans* 2891
 - potassium nutrition 2869
 - varietal differences 1303, 2890, 5362, 5369
 - fruit ripening 5362
 - carotene, content, growth substances 6094
 - colour 2890
 - harvesting time 4584
 - irradiation, X-rays, post-harvest 8797
 - light 8797
 - nitrogen nutrition 7786
 - potassium nutrition 3801
 - seed treatment, bacterial fertilizers 6074
 - storage, temperature 7809
 - temperature 8805
 - composition
 - carbohydrates 1302
 - seed, treatment 246
 - dry matter 1302
 - harvesting date 5367
 - varietal differences 5367
 - mutagens 7769
 - nitrogen nutrition 7786, 8805
 - organic acids 1302
 - parthenocarp 7810
 - photoperiodism 602
 - Phytophthora infestans* 2891
 - potassium 6937
 - potassium nutrition 3801
 - protected cultivation 4579
 - storage, temperature 7809
 - temperature 5369
 - varietal differences 5369
 - cracking 2890, 7791

Tomato fruit contd.

- cracking contd.
 - pruning and training 6906
- cuticle, growth substances, absorption 2885
- drop, nitrogen nutrition 5345
- ethylene
 - concentration, submersion 3837
 - production
 - growth substances 3813
 - temperature 3813
- firmness, storage, temperature 7809
- flavour
 - parthenocarp 7810
 - potassium, content 6937
- irradiation
 - gamma rays, pigments 5365
 - ionizing, disease control 604
 - X-rays, post-harvest 8797
- lipids, content, ripening 6933
- nitrogen, content, temperature 8805
- number
 - mulching, paper 4559
 - planting, spacing 1282
- nutrients
 - content
 - grafted plants 8795-8796
 - growing, under glass 4565
- parthenocarp
 - composition 7810
 - flavour 7810
 - growth substances
 - CPA 6934
 - endogenous 8801
- phytoene 2898
- pigments
 - biosynthesis 257
 - packing, plastic bags 2136
- post-harvest treatment, gamma rays, respiration 1504
- potassium
 - content 6937
 - fruit disorders 3820
 - proteins, content 4941
- quality
 - assessment 5370
 - carbon dioxide, supplementary 4566
 - growth substances 6099
 - irradiation, X-rays, post-harvest 8797
 - light 8797
 - pollination 5363-5364
 - standards 6107
 - temperature 4566
- ripening 2892, 8799
 - amino acids, metabolism 8800
 - ascorbic acid, content 8806
 - biochemistry 1299
 - deblossoming 2131
 - enzyme activity 88, 256, 1298, 8799
 - enzymes 8793
 - content 2883
 - ethylene 6103
 - Ficus sycomorus*, fruit extract 1811
 - growth substances 4583, 6099, 6102, 6935, 8798-8799, 8802, 8804
 - Betokson 676
 - ethephon 689, 2134, 2886, 3817-3818
 - ethyl hydrogen 1-propylphosphate 689
- irradiation
 - ionizing 604
 - X-rays, post-harvest 8797
 - light 8797
 - lipids, content 6933
 - mulching, paper 4559
 - nitrogen nutrition 6910
 - nutritional value 1302
 - organic acids
 - content 1298
 - metabolism 2135
 - packing, plastic bags 2136
 - potassium nutrition 6910, 7788
 - seed treatment, bacterial fertilizers 6074
 - storage 6103
 - controlled atmosphere 8803
 - temperature 7809
- sand penetration, assessment technique 6052
- set
 - insecticides 2122
 - temperature 2133, 5340

Tomato fruit contd.

- shape 2890
- growth substances, CPA 6934
- size
 - carbon dioxide, supplementary 4566
 - deblossoming 2131
 - growth substances 6099
 - CPA 6934
 - GA 2884
 - nitrogen nutrition 6910, 7786
 - planting, spacing 1282
 - pollination 5364
 - potassium nutrition 3801, 6910, 7788
 - pruning and training 7780
 - temperature 4566
 - topping 8771
- splitting
 - growth substances 2128
 - pericarp, morphology 2128
- sugars
 - content 6834, 8667
 - mutagens 7769
 - Phoma destructiva* 6106
 - sulphur nutrition 6079
- Tomato grafted on potato**
 - calcium
 - content
 - fruit 8795-8796
 - tuber 8795-8796
 - magnesium
 - content
 - fruit 8795-8796
 - tuber 8795-8796
 - nitrogen
 - content
 - fruit 8796
 - tuber 8796
 - phosphorus
 - content
 - fruit 8796
 - tuber 8796
 - potassium
 - content
 - fruit 8795-8796
 - tuber 8795-8796
- Tomato growth substances**
 - absorption
 - fruit
 - abscisic acid 2885
 - 2,4-D 2885
 - NAA 2885
 - biosynthesis, IAA 250, 2127
 - cold, resistance, chlormequat 6100
 - disease incidence
 - GA 3815
 - IAA 3815
 - endogenous
 - cotyledons 248
 - diseased plants, *Verticillium dahliae* 3325
 - fruit 8801
 - humic acid 684
 - root, nematodes 244
 - enzyme activity
 - fruit
 - aminozide 8799
 - ethephon 8799
 - GA 8799
 - IAA 8799
 - leaf
 - 2,4-FET 6102
 - 2,4,5-FET 6102
 - 2,4,5-T 6102
 - plant
 - aminozide 5361
 - GA 5361
 - ethylene, production, ethephon 3813
 - flower, morphology, GA 2884
 - flower bud
 - initiation
 - kinetin 7807
 - thymine 7807
 - flowering
 - date
 - chlormequat 6093
 - phenyl mercuric acetate 6093
 - kinetin 7807
 - thymine 7807
 - fruit
 - ascorbic acid
 - content
 - aminozide 6094
 - GA 6094

Tomato growth substances contd.

- fruit contd.
- carotene
 - content
 - aminozide 6094
 - GA 6094
- colour
 - aminozide 8799
 - ethephon 8799
 - GA 8799
 - IAA 8799
- firmness
 - aminozide 8799
 - ethephon 8799
 - GA 8799
 - IAA 8799
- parthenocarp, CPA 6934
- ripening
 - aminozide 8799
 - Betokson 676
 - ethephon 689, 2134, 2886, 3817-3818, 4583, 6935, 8798-8799, 8802, 8804
 - ethyl hydrogen 1-propylphosphate 689
 - 2,4-FET 6102
 - 2,4,5-FET 6102
 - GA 8799
 - IAA 8799
 - 2,4,5-T 6102
- shape, CPA 6934
- size
 - CPA 6934
 - GA 2884
- splitting
 - GA 2128
 - IAA 2128
 - NAA 2128
- glycosides
 - content
 - GA 8794
 - IAA 8794
- hypocotyl, growth, bromodeoxyuridine, deoxyuridine 3812
- interaction
 - bromodeoxyuridine, deoxyuridine
 - application 3812
 - temperature, ethephon 3813
- leaf
 - senescence
 - ethephon 8798
 - GA 1297
 - MH 1297
 - metabolism, IAA 251, 2127
 - nematode relationships
 - chlorfluoreno 8785
 - ethephon 8785
 - Phosphon-D 8785
 - nutrient absorption
 - aminozide 6094
 - GA 6094
 - organic acids
 - content
 - aminozide 5361
 - GA 5361
 - redox processes
 - 2,4-FET 5357
 - 2,4,5-FET 5357
 - 2,4,5-T 5357
 - residues
 - fruit, chlormequat 5198
 - plant
 - 2,4-D 2104
 - 2,4,5-T 2104
- responses
 - aminozide 6099
 - azathymine 7807
 - benzyladenine 5359
 - chlormequat, review 8310
 - GA 5359, 8794
 - heteroauxin 7808
 - IAA 8794
 - IBA 6101
 - NAA 6101
 - SRV 7808
- root, growth, bromodeoxyuridine, deoxyuridine 3812
- shoot
 - growth
 - kinetin 7807
 - thymine 7807

Tomato growth substances contd.

- stomata
 - movements
 - aminozide 6093
 - chinosol 6093
 - chlormequat 6093
 - phenyl mercuric acetate 6093
- sugars
 - content
 - aminozide 5361
 - GA 5361
 - translocation, heteroauxin 1320
- water relations
 - chlormequat 6100
 - 2,4-FET 6102
 - 2,4,5-FET 6102
 - 2,4,5-T 6102
- Tomato leaf**
 - anatomy, soil salinity 8778
 - bud development on 247
 - composition
 - chlorophyll, seed, treatment 246
 - manganese, soil, sterilization 240
 - nitrogen, soil, sterilization 240
 - pigments 254
 - development
 - ascorbic acid, content 5362
 - enzyme activity 5362
 - epinasty
 - fusaric acid 5358
 - picloram 5358
 - injury, enzyme inhibitors 8790
 - nutrient absorption, manganese, surfactants 1136
 - nutrients, content, growing, under glass 4565
 - senescence
 - amino acids, content 1297
 - growth substances 8798
 - GA 1297
 - MH 1297
 - light, duration 1297
 - water content
 - drought 2474
 - flooding 2474
 - soil salinity 8778
- Tomato nutrition** 869
 - annual report, Rhodesia 4364
 - boron, disease incidence, tobacco mosaic 6913
 - calcium 6076
 - absorption 5192
 - annual report, German Federal Republic 7599
 - root, mechanism 4561
 - deficiency 4567
 - blossom-end rot 7790
 - symptoms 4567
 - fluorine toxicity 6932
 - phosphorus absorption 6911
 - cobalt
 - amino acids, content 8772
 - rhizosphere, micro-organisms 8772
 - fertilizers
 - algae
 - enzyme activity 6098
 - fruit, ascorbic acid, content 6098
 - leaf, ascorbic acid, content 6098
- FYM 8776
 - general
 - flower, development 6931
 - leaf analysis, symposium 2489
 - toxicity, soil amendments 8774
 - humic acid 684
 - interaction, temperature 2132
- iron
 - absorption, soil salinity 6912
 - deficiency 7789
 - leaf, composition 7789
 - sources, soilless culture 2845
- lead 173
- magnesium
 - deficiency 4567
 - symptoms 4567
 - disease incidence 2205, 5412
 - major elements, requirements 8775
 - manganese 1284, 6076
 - absorption, soil salinity 6912
 - application
 - foliar, surfactants 1136
 - seed 7773
 - leaf, absorption, surfactants 1136
 - minor elements 608

Tomato nutrition *contd.*

- minor elements *contd.*
 - availability, nitrogen nutrition 8589
 - requirements 8775
 - sources 8589
 - toxicity, nitrogen nutrition 8589
- molybdenum, deficiency, growing in peat 4382, 7628
- nitrogen 1282, 1284, 5215, 5345, 6038, 6076, 6909–6910, 8777
 - application, time 3800
 - availability 117
 - darkness 5356
 - deficiency 4567
 - glycosides, content 8794
 - symptoms 4567
 - disease incidence
 - Botrytis cinerea* 5345
 - Phytophthora infestans* 5345
- fruit
 - colour 7786
 - composition 7786, 8805
 - size 7786
- glycoside, content 249
- leaf
 - chlorophyll 6077
 - pigments 6077
 - nitrate accumulation 2870
 - photosynthesis 6907
 - plant, manganese content 4563
 - requirements 4560
 - light intensity 6908
 - soil analysis 4560
 - sources
 - compared 1286, 2870, 3800, 5214
 - minor elements 8589
 - minor elements toxicity 8589
 - slow-release 7785
 - toxicity 2870, 3800
- NPK 118, 1143, 2869, 6071, 8773, 8776
 - pigment, content 254
- organic fertilizers, leaf, chlorophyll, pigments, content 6077
- organic hydrolysate 6073
- organic liquid manure, early ripening 683
- peat extracts, plant, composition 5344
- phosphorus 1282
 - absorption
 - calcium nutrition 6911
 - herbicides, trifluralin 8770
 - humates 8774
 - nutrient solution, bicarbonate 7787
 - availability 120
 - calcium content 6826
 - darkness 5356
 - deficiency 4567
 - symptoms 4567
 - disease incidence 241
 - metabolism, humates 8774
 - photosynthesis 6907
 - potassium content 6826
 - rhizosphere, micro-organisms 8620
 - soil temperature 6826
 - sources 3802
 - compared 8777
 - translocation, nutrient solution, bicarbonate 7787
- potassium 1282, 1284, 5215, 6076, 6909–6910, 7788
 - absorption, nitrogen nutrition 6910
 - application, foliar 3801
 - assimilates, translocation 1295
 - deficiency 4567
 - symptoms 4567
 - disease incidence 3801
 - Botrytis cinerea* 5345
- fruit
 - colour 3801
 - composition 3801
 - flavour 6937
 - size 3801
 - requirements, light intensity 6908
 - respiration 1295
- strontium, absorption, root, mechanism 4561
- sulphur 6079
 - nitrogen metabolism 6079
- zinc
 - absorption, soil salinity 6912
 - deficiency, chloroplast, proteins, content 4564

Tomato nutrition *contd.*

- zinc *contd.*
 - respiration
 - leaf 6080, 6922
 - root 6922
- Tomato pests**
 - Aphelenchus avenae*, disease complex 8782
 - aphids 4383
 - Bemisia tabaci*
 - control 8786
 - vectors, leaf curl 8786
 - virus vectors, yellow leaf curl 3808
 - Circulifer tenellus*, virus vectors, curly top 2871
 - Drosophila* spp., resistance, breeding and selection 5335
 - Heliothis virescens*, parasites 4430
 - H. zea*, parasites 4430
 - Hemicriconemoides chitwoodi* 5132
 - Hemicyclophora parvana*, control 6975
 - Hemitarsonemus latus* 4539
 - Heterodera rostochiensis* 5352, 6088
 - control 6089
 - host-pest relationships 4581
 - population studies, nematocides 7800
 - resistance, rootstocks 2121
 - integrated control 3627
 - Liriomyza munda* 1288, 4576–4577
 - Meloidogyne arenaria*, nutrient absorption 2878
 - M. hapla* 686
 - growth substances 8785
 - Meloidogyne incognita* 685, 5351, 6090
 - fungus complex 2877
 - host-pest relationships 3807
 - population studies 6091
 - resistance 3807
 - root composition 244
 - varietal resistance 1279
 - Meloidogyne javanica* 685–686
 - growth substances 8785
 - nutrient absorption 2878
 - Meloidogyne* spp. 1290, 8784
 - resistance 2859
 - soil fumigation 7801, 8783
 - Phthorimaea operculella*, control 6921
 - Pratylenchus penetrans*, disease relationship 243
 - Radopholus similis* 2394
 - alternative hosts 7608
 - review, Bolivia 5671
 - Rotylenchulus reniformis* 2394
 - population studies 6091
 - varietal resistance 7771
 - Tetranychus telarius* 4539
 - integrated control 7802
 - varietal resistance 1291
 - Trialeurodes vaporariorum* 1292, 2122, 3809, 4576–4577
 - integrated control 7802
 - Trichodorus christiei*
 - control 6975
 - root growth 687
 - Tylenchulus semipenetans* 2394
 - Vasates lycopersici* 4539
- Tomato plant**
 - composition
 - analysis methods tissue preparation 5170
 - glycosides, nitrogen, nutrition 249
 - seed treatment 6062
- Tomato propagation**
 - cuttings
 - source plants
 - nutrition, nitrogen 2130
 - protein content 2130
- Tomato root**
 - enzyme activity 8792
 - growth 1147
 - anaerobic conditions 6930
 - tissue culture 2129
 - Trichodorus christiei* 687
 - tomatine, biosynthesis, tissue culture 2129
 - treatment, growth substances 7808
- Tomato rootstocks**
 - CRA 66, as a rootstock, eggplant 4545
 - nematode resistance, *Heterodera rostochiensis* 2121
- Tomato seed**
 - black, germination 6081
 - composition, oil 253

Tomato seed *contd.*

- enzymes characterization, heterosis 3810
- germination
 - inhibition 1281
 - manganese 7773
 - irrigation 4376
 - pelleted seed 7774
 - seed, size 4556
 - soil, temperature 678
 - temperature 2093–2094
 - time, genetic control 4556
 - mineral elements, content 6059
 - size, yield correlations 6060
- sowing
 - composts, peat, nutrition 1286
 - direct 1943
 - direct v. transplanting 7780
 - peat 7606
 - spacing 2864
- treatment
 - bacterial fertilizers 6074
 - boron 6078
 - capsicum fruit extract 2093–2094
 - cobalt 6078
 - copper 6078
 - fungicides 3622
 - hardening
 - plant composition 6062
 - plant water relations 6062
 - hypertonic salt solution, wafering 6061
 - irradiation
 - gamma rays 246
 - pollen, viability 245
 - manganese 6078, 7773
 - molybdenum 6078
 - mutagens 2857
 - fruit composition 7769
 - pelleted 1943, 7774
 - zinc 6078
- Tomato shoot**
 - apices, mechanical stresses 7803
 - composition, growth substances, IAA 251
- Tomato soil**
 - amendments
 - ammonified coal 7784
 - asphalt 2114
 - humates 8774
 - peat 7784
 - perlite 2114
 - polystyrene, nutrient availability 117
 - sawdust 1285, 2114
 - silt 7784
 - urea formaldehyde foam resins, nutrient availability 117
 - vermiculite 2114
 - fumigation
 - bromine
 - content
 - fruit, methyl bromide 8789
 - leaf, methyl bromide 8789
 - Fusarium oxysporum*
 - f. *lycopersici*
 - chloropicrin 7795
 - DD-MENCs 4570
 - methyl bromide 7795
 - Heterodora rostochiensis*, methyl bromide 6089
 - Meloidogyne* spp.
 - carbathion 8783
 - thiazone 7801
 - Olpidium brassicae*, methyl bromide 8651
- moisture, plant water relations 7782
- nutrients, availability, amendments 7784
- salinity
 - enzyme activity 6926, 8778
 - iron, absorption 6912
 - leaf anatomy 8778
 - leaf water content 8778
 - manganese, absorption 6912
 - stomata number 8778
 - zinc, absorption 6912
- sterilization
 - steam
 - disease control 7795, 8651
 - leaf, composition 240
- temperature
 - plant nutrition 6826
 - seed germination 678
 - seedling growth 678
- types
 - plant composition 7818

Tomato soil contd.

types contd.

plant water relations 7782

Tomato varieties 2887, 4371

annual report

Sarawak 3609

UK 598

autumn harvesting 3790

comparative studies 6928

comparative trials 675, 1280

Bulgaria 1278, 4555

low sunlight 1283

Nicaragua 6055

Pakistan 2890

USA 4551

USSR 4550

Venezuela 4554

disease resistance 675, 8765

Alternaria spp. 4553, 6055

annual report, Western Samoa 7602

anthracnose fungi 2107

Cladosporium fulvum 4552, 7772

curly top 4551

Erwinia aroideae 2873*Fusarium oxysporum*, f. *lycopersici*

2860, 6057-6058

Fusarium spp. 2858, 5337*Phytophthora infestans* 3787, 6900*Pseudomonas solanacearum* 7770*Pyrenochaeta lycopersici* 2109*Septoria lycopersici* 4575*Verticillium albo-atrum* 7799

V. spp. 5337

ES-32-1 4553

fruit

ascorbic acid, content 1303

composition 5369

cracking 7791

greenhouse 675, 2858, 3791, 4550, 5333

Gringo 6056

high density planting 4554, 5240

Lafayette 8764

mechanical harvesting 2862, 2889, 4551, 6056

Ohio M-R 13 8765

ozone, injury, resistance 673

pest resistance 1291

Meloidogyne incognita 1279*Rotylenchus reniformis* 7771

processing 1134, 2862, 4554, 6055, 6901

canning 4585

Korea 674

Redstaker 8766

report, Sri Lanka 2733

Rouge de Marmande 5337

Saturn 6057-6058

soiless culture, USSR 5336

Stakeless 3793

sub-tropics 2861

tropics 2112

USA 3791

USSR 2861

Venus 6057-6058

Vermillion 8764

virus tolerance, leaf curl 5346

417 3792

Topworking, methods, apple 8347*Torreya nucifera*, seed, oil, fatty acids 2374**Tortrix** moths, control, apple pests 4988**Tortricidae**, apple pests, review 7282*Tortrix politana*, control, cultural methods,

tea pests 3279

Toxoptera aurantii, control, cultural

methods, tea pests 3279

T. citricidus

citrus pests 4003

virus vectors, tristeza, citrus pests 4798

Trace elements

absorption 3299

metabolism 3299

toxicity 3299

translocation 3299

Trachelospermum jasminoides

soil

salinity

plant, tolerance 2161

sodium, chlorine 2161

Trachyspermum ammi

nutrition

nitrogen 9006

potassium 9006

sulphur 9006

Trachysphaera fructigena, incidence, cacao

diseases 4847

Tractors

annual report, UK 2487

fruit trees and plants 2511

Trade, FAO, yearbook 863**Tradescantia**

cytology, meiosis 2210

enzymes 5895-5896

irradiation

neutrons, mutation induction 5418

X-rays, mutation induction 5418

light, stomata, movements 5417

mutagen testing 1346

stomata, movements, light 5417

Tradescantia spp., stomata, physiological

studies, annual report, Australia 6480

Trametes hirsutus, chestnut (*Castanea*)

diseases 1006

Translocation

anaerobic conditions, squash 8658

carbohydrates, flowers, cut 2296

growth substances, bean (*Phaseolus*)

3714

inorganic salts 1673

measurement, bean (*Phaseolus*) 2028

mechanism 4

cress 2775

marrow 2775

phloem blockage, bean (*Phaseolus*) 5987

studies 2510

growth substances

bean (*Vicia*) 7726*Cleome hassleriana* 7881

coleus 5453

photosynthates, hop 3959

radish 8639

tomato, excised roots 7805

vascular connections, *Fritillaria* spp.

2965

Transpiration (see also Water relations)

anti-transpirants

boron, absorption, sugar cane 4102

detection 4918

fruit

composition, cherry 2630

cracking, cherry 4239

quality, olive 2424

size, cherry 2630

leaf senescence, annuals 3333

persistence, Pinolene, orange 6354

stomatal responses, watermelon 8657

tomato 6093

vegetables 3333

annual report, UK 1934

water relations, sugar cane 4102

calcium, translocation, apple 1775

diurnal variations, irrigation, grapevine

6737

evapo-

estimation, sugar cane 9263

measurement

lettuce 4413

sugar cane 9262

seasonal variations, vegetables 5354

studies, citrus, annual report, USA

2375

fluorine, pea 3735

foliar nutrition, coffee 9171

light intensity, bean (*Phaseolus*) 2793

measurement, annual report, Netherlands

5

mechanism

bean (*Phaseolus*) 8695

electrical analogue 2509

nitrogen nutrition, coffee 9171

photosynthesis, bean (*Phaseolus*) 2793

potassium nutrition, coffee 9171

pruning and training, apple 5741

root hydrostatic pressure, capsicum 8755

rootstock-scion relationships, peach 1023

rootstocks, apple 5741

soil pH, *Schizandra chinensis* 8968

temperature, pineapple 8174

temperature of fruit, grapevine 7582

temperature of leaf, grapevine 7582

toxins

fusicoocin

bean (*Phaseolus*) 3712

vegetables 4478

virus infection, grapevine 2722

water relations, tea 4112

Transpiration contd.

water use efficiency, varietal differences,

grapevine 1925

Transport

chutes, grapevine fruit 4358

container-, lemon, grapefruit, mandarin

and tangerine, orange 4016

containers

bulk bins, bulbs, narcissus, annual

report, UK 3834

carbon dioxide concentration, lettuce

2756

compared

lemon 1507

orange 1507

refrigerated

apricot 7426

cucumber and gherkin 7426

design, pineapple 1614

grapevine, fruit 7426

peach 7426

plum 7426

trays, liners, pear 1033

conveyor belt, pot plants 6965

damage

apple 7307

cherry 7307

grapevine fruit 7307

onion 7307

strawberry 7307

economics, apple, annual report,

Netherlands 5697

fruit 8312

containers, polystyrene, economics, apple

980

ground cover plants 8848

heat exchange, coefficients, citrus 6364

pallets, high density planting, fruit 3362

pre-cooling

lemon, grapefruit, mandarin and

tangerine, orange 4016

strawberry 1077

tomatoes, annual report, Australia

7596

raspberry 5089

suitability, breeding and selection,

grapevine fruit 7547

sulphur dioxide treatment, grapevine fruit

7307

temperature, lemon, grapefruit, mandarin

and tangerine, orange 4016

vacuum cooling

carnation 2164

chrysanthemum 2164

flowers, cut 2164

gladiolus 2164

rose 2164

vegetables 8312

annual report, Cyprus 3604

in water, stone fruits 1718

Tranzschelia discolor, peach diseases, annual

report, USA 451

T. spp., report, Australia, *Prunus* spp.,

diseases 3344

Trapa spp., taxonomy 266**Tree**

crown foliar density

light intensity, mandarin and tangerine

8064

photosynthesis, apple 7395

pruning and training, mandarin and

tangerine 8067

crown fruit distribution

light intensity, mandarin and tangerine

8064

pruning and training, mandarin and

tangerine 8067

height

estimation, aerial photography, apple

4174

light interception, apple 8357

shape, light interception, apple 8357

size, light interception, apple 8357

volume

estimation

apricot 8452

peach 8452

plum 8452

Trees

history, UK, book 7938

legends, UK, book 7938

Trees and shrubs

air pollution, studies, equipment 7845

Trees and shrubs contd.

- breeding and selection, juvenility 5689
 - conference 6211
 - diseases, virus 2916
 - drought, resistance 1382–1383
 - economics, Netherlands 7031
 - ethylene, treatment 2979
 - flowering, precocity 5689
 - fluorine, toxicity, plant tolerance 7845
 - frost
 - resistance 2158
 - annual report, Canada 2154
 - growing
 - book 3907
 - economics, Netherlands 7031
 - New Zealand 3906
 - Poland 3906
 - UK, book 8283
 - juvenility
 - breeding and selection 5689
 - review 5689
 - landscaping 2908, 8940
 - parks 2908
 - photoperiodism, root development, annual report, USA 3835
 - propagation 1382
 - cuttings
 - annual report
 - German Federal Republic 7844
 - Irish Republic 2909
 - mist 4684
 - rooting capacity 1328
 - materials, selection, health 2916
 - pruning and training
 - book 3907
 - container-grown 2275
 - roadside
 - annual report, USA 2152
 - salinity damage 313
 - root
 - development
 - photoperiodism, annual report, USA 3835
 - temperature, annual report, USA 3835
 - staking 2979
 - sulphur dioxide, plant resistance 7845
 - temperature, root development, annual report, USA 3835
 - trunk, girth 2979
 - uses, various sites 2274
 - value
 - aesthetic 1316
 - functional 1316
 - varieties, evaluation 2916
 - as weeds, vegetables 1946
 - wind, damage 2979
 - winter hardiness 1382
- Trialeurodes spp.**, control, annual report, German Federal Republic 7843
- T. vaporariorum**
- biological control, cucumber and gherkin pests 3685
 - control
 - fuchsia pests 7956
 - growth substances, aminozide, petunia pests 3850
 - cucumber and gherkin pests, annual report, Belgium 8578
 - fuchsia pests, annual report, UK 6128
 - greenhouse crops, pests 2503, 6500
 - integrated control
 - cucumber and gherkin pests 7802
 - tomato pests 7802
 - tomato pests 1292, 2122, 3809, 4576–4577
- Trichoderma spp.**
- mushroom diseases 1312
 - Panax ginseng*, diseases 3052
 - post-harvest dips, orange diseases 6362
 - sugar cane diseases, annual report, USA 9221
- T. viride**
- antagonistic to, *Stereum purpureum*, plum 8476
 - fungal parasite, *Stereum purpureum*, plum 6659
 - soil, micro-organisms, replanting, grapevine 1105
 - soil steaming, mushroom diseases 6956
- Trichodorus christiei**
- control
 - capsicum pests 6975

Trichodorus christiei contd.

- control contd.
 - tomato pests 6975
 - onion pests, annual report, USA 4368
 - root growth, tomato pests 687
 - rubber pests 9215
 - vectors, mosaic, papaw pests 9193
- T. spp.**
- bulbs, pests 3864
 - sugar cane pests 7246
 - virus, vectors, rattle virus, tulip 2258
- Trichogramma australicum**, parasite of, *Chilo enfuscatellus*, sugar cane 1641
- T. spp.**
- parasite of
 - Archips xylosteana*
 - apple 2580
 - cherry 2580
- Trichoplusia ni**
- biological control
 - cabbage pests 1172, 4427, 7657
 - lettuce pests 5913
 - cabbage pests 1172, 5196, 5929
 - annual report
 - Canada 1944, 2734, 5883
 - USA 8585
 - cauliflower and broccoli pests 5929
 - celery pests, annual report, USA 8585
 - control
 - cabbage pests 7657
 - watermelon pests 6824
 - varietal resistance, cabbage pests 5919
 - vegetables, pests, annual report, USA 4367–4368
- Trichosanthes anguina**, pests, *Dacus cucurbitae*, control 5223
- T. spp.**
- diseases, *Erysiphe cichoracearum* 6823
 - seed, oil, composition 2339
 - varieties, report, Sri Lanka 2733
- Trichothecium spp.**, control, apple diseases 7413
- Tridax spp.**, as weeds, oil palm 1601
- Trifolium repens**, lawns and sports turf, mowing, height 7924
- T. spp.**
- lawns, Norway 3885
 - roadsides, establishment 3888
 - as weeds
 - bean (*Phaseolus*) 2017
 - lawns and sports turf 3892
- Trigonella spp.**, seed, composition, glycoflavones 353
- Trioza erytreae**
- aerial spraying, orange pests 4805
 - citrus pests 4003
 - control, citrus pests 4804
 - parasites, citrus pests 5566
- T. viridula**, plant composition, carrot pests 6943
- Triterpenes**, extraction, *Rubus* spp. 1053
- Trombidium spp.**, predator on, *Phylloxera vitifoliae*, grapevine 1921
- Tropical crops**
- fungicides, disease control, copper, review 1694
 - monocotyledons, book 1668–1669
 - Palmaceae 2434
 - root, anatomy 3172
 - storage, losses 4147
- Tropical plants**
- biology, book 9120
 - ecology, book 9120
- Tryporyza nivella**, incidence, sugar cane pests 853
- Tulip**
- annual report
 - Netherlands 1314, 2219, 6127
 - UK 732–733, 3874, 7907
 - USA 8839
 - carbohydrates, metabolism, bulb, storage temperature 7908
 - cell, division, growth relationships 8906
 - chromosomes, structure 8901
 - classification, Netherlands 2255
 - enzyme activity
 - flower 7911
 - phytoalexins, production 736
 - ethylene
 - exposure, bulb, bud opening 6185
 - injury, flower bud 7909
 - treatment, bulb 6185

Tulip contd.

- flowering
 - date
 - bulb, storage temperature 3875
 - growth substances 8907
 - temperature 8907
 - growth substances, GA 1367
 - inhibition, saline water 5436
 - forcing 6165
 - bulb, storage temperature 3875, 4663
 - chilling requirements 7913
 - disease incidence 2259
 - disorders 1365
 - growth substances 8907
 - labour requirements 7016
 - plunging under straw 6184
 - pre-cooling 1366
 - injury 734, 2954–2955
 - temperature 4663, 8907
 - fungicides, injury, etridiazol 2259
 - growth phases 7912
 - growth studies
 - mathematical model 6187
 - shoot-cell length relationships 8906
 - hail, damage 2256
 - irrigation 4665
 - recommendations 293
 - saline water 5436
 - salts concentration 2257
 - labour requirements, forcing 7016
 - organic acids, content, disease incidence 3877
 - planting
 - disease incidence 2958
 - late, pre-cooling 3876
 - spacing 5435
 - bulb number 8903
 - bulb size 7014, 8902–8903
 - work studies 1317, 8904
 - seedling, pricking out, work studies 1317
 - temperature, flower bud initiation 297
 - tulipalins, determination 7015
 - work studies, planting 8904
- Tulip bulb**
- bud opening, ethylene-induced 3880
 - ethylene
 - concentration, submersion 3837
 - injury 3880
 - production, storage 3880
 - formation, mother bulb treatment 6183
 - harvesting, dates 6183
 - heat treatment 1690
 - nematode control 2260
 - maturation, artificial 6183
 - number, planting, spacing 8903
 - phytoalexins, production 736
 - production 287
 - annual report, UK 2153
 - size, planting, spacing 7014, 8902–8903
 - storage
 - ethylene
 - disorder incidence 6185, 7909
 - growth inhibition 6185
 - production 3880
 - temperature 1364, 3876, 4663
 - carbohydrates, metabolism 7908
 - flower colour 7908
 - flower development 735, 7908
 - flowering date 3875, 7908
 - pre-cooling, injury 734
 - treatment
 - ethylene 6185
 - temperature 6183
- Tulip diseases**
- annual report, USA 1315
 - Augusta disease virus, planting date 2958
 - Botrytis cinerea* 3877
 - host-pathogen relationships 294
 - B. tulipae* 3877
 - hail damage 2256
 - host-pathogen relationships 294
 - soil, fumigation 2959
 - Fusarium oxysporum* 296
 - ethylene, production 3880
 - planting date 2958
 - F. spp.*, bulb treatment 2259
 - Macrophomina phaseolina* 3317
 - necrosis 5437
 - Pythium* spp., bulb treatment 2259
 - rattle virus 2258
 - planting date 2958
 - vectors, *Trichodorus* spp. 2258

Tulip diseases *contd.*

- Sclerotinia bulborum*, soil, fumigation 2959
- Sclerotium wakkeri* 3317
- soil-borne 3319
- tobacco mosaic 7910
- tomato bushy stunt 5437
- tulip breaking, varietal resistance 2953
- veinal streak 2956-2957, 8905
- Tulip disorders** 1365
 - blast 734
 - bud blast 7909
 - bud necrosis 3880
 - bulb storage 6185
 - topple, calcium deficiency 1364
- Tulip flower**
 - biology 7911
 - bud, injury, ethylene 3880
 - bud initiation
 - bulb treatment 6183
 - temperature 297
 - colour, bulb storage temperature 7908
 - composition 7911
 - cut
 - fluorine injury, tap water 2913
 - preservatives
 - fluorine injury mitigation 2913
 - ancymidol 3879
 - Phosphon 3879
 - production 287
 - stem bending 3879
 - development
 - bulb storage, temperature 735
 - bulb storage temperature 7908
 - enzyme activity 7911
 - injury, bulb storage, ethylene exposure 7909
 - phytoalexins, production 736
 - stem
 - length
 - bulb, storage temperature 3875
 - growth substances 8907
 - temperature 8907
 - Tulip flowering**, date, bulb storage temperature 7908
 - Tulip growth substances**
 - endogenous, plant 295
 - flower stem, length, GA 8907
 - flowering
 - date, GA 8907
 - GA 1367
 - flowers, cut
 - stem
 - bending
 - ancymidol 3879
 - Phosphon 3879
 - length
 - ancymidol 3879
 - Phosphon 3879
 - injury, Phosphon 3879
 - Tulip nutrition**
 - annual report, Netherlands 6962
 - calcium 1364
 - Tulip pests**
 - Ditylenchus dipsaci* 2260, 6186
 - alternative hosts 3878
 - annual report, Netherlands 6961
 - mites, bud necrosis 3880
 - Tulip root**, formation, bulb treatment 6183
 - Tulip seed**, sugars, content 8883
 - Tulip soil**
 - fumigation
 - Botrytis tulipae*, Vapam 2959
 - Sclerotinia bulborum*, Vapam 2959
 - temperature, disease incidence 2259
 - Tulip varieties**
 - disease resistance, tulip breaking 2953
 - polyploid 2953
 - Tulipa gesneriana**
 - flower
 - bud development 8900
 - bud initiation 8900
 - T. spp.**
 - classification, Netherlands 2255
 - diseases, tobacco mosaic 7910
 - pollination, double fertilization 2960
 - seed, development 298
 - tulipoides 8908
 - T. stellata**, plant, variation 5434
 - Tung**
 - annual report, Malawi 9119

Tung *contd.*

- chilling requirements, annual report, USA 2433
- flowering, date, growth substances 3170, 4828
- frost, protection, flowering date, growth substances 4828
- insecticides, injury, dimethoate 8117
- Tung fruit**
 - set
 - growth substances
 - aminozide 3170
 - naphthenic oil 3170
- Tung growth substances**
 - flowering
 - date
 - aminozide 3170, 4828
 - naphthenic oil 3170
 - fruit
 - set
 - aminozide 3170
 - naphthenic oil 3170
- Tung pests**, *Heliothrips haemorrhoidalis* 8117
- Tung seed**, sowing, dates, USSR 7169
- Tungsten**
 - enzyme activity, leaf, spinach 2747
 - proteins, metabolism, spinach 2747
- Tunisia**
 - fruit trees and plants, growing 4369
 - vegetables, growing 4369
- Tunnels**
 - plastic 14
 - annual report
 - Austria 114
 - Belgium 1060
 - cabbage 2758
 - carnation 5398
 - carrot 5373
 - cauliflower and broccoli 7647
 - chicory 5176
 - cucumber and gherkin 4449
 - frost, protection, by sprinkler irrigation, bean (*Phaseolus*) 2016
 - frost protection, mandarin and tangerine 7130
 - heat loss, annual report, Irish Republic 6482
 - late harvesting, strawberry 8521-8522
 - lettuce 1686, 2753
 - melon (cantaloup and musk) 7679, 8646
 - onion 3760
 - overwintering, strawberry 6700
 - planting dates, strawberry, annual report, Irish Republic 1857
 - propagation
 - rose 5475
 - trees and shrubs, annual report, Irish Republic 2909
 - rainfall protection, vegetables 5166
 - strawberry 1686, 7531
 - annual report, UK 5096
 - strength 7293
 - temperature 884-885
 - cloud cover 885
 - types compared
 - annual report, Irish Republic 6482
 - fruit, set, capsicum 6889
 - strawberry 3554
 - annual report, strawberry 4297
 - vegetables 1945
 - variety trials, carrot 8808
 - vegetables 1187
 - annual report
 - German Federal Republic 7600
 - UK 4366, 6774
 - ventilation, strawberry 7530
 - weed control, lettuce, annual report, UK 5885
 - wax paper, tomato 2113-2114
 - Turkey**, crops, nuts 25
 - Turmeric**
 - essential oil, determination 7985
 - nutrition, potassium 7076
 - research, India, review 7968
 - Turpin**
 - annual report
 - Austria 114
 - UK 1936
 - ascorbic acid, content, mother-plant treatment 1178

Turnip *contd.*

- calcium, content, mother-plant treatment 1178
- chlorophyll, content, phytochrome relationships 4937
- enzyme activity, respiration 148-149
- growing, as an intercrop, sugarcane 5650
- herbicides, injury, EPTC 3660
- insecticides
 - absorption
 - aldrin 2762
 - dieldrin 2762
 - residues
 - arsenic 3329
 - plant, lead arsenate 1951
 - translocation
 - aldrin 2762
 - dieldrin 2762
- irradiation, gamma rays, mutation induction 8613
- lead, residues 4936
- mutants
 - induction 8613
 - pest resistance 8613
- phytochrome, -chlorophyll relationships 4937
- respiration, enzyme activity 148-149
- seedling
 - emergence, soil temperature 4447
 - growth, inhibition, *Coronilla varia* seed leachate 7625
- steckling, size, seed yield 7663
- sugars, content, mother-plant treatment 1178
- water, content, mother-plant treatment 1178
- water relations, nutrition 5926
- weed control 7653
 - annual report, USA 1935
- Turnip diseases**
 - cabbage yellows, incidence 614
 - Plasmiodiophora brassicae*
 - assessment methods 5165
 - varietal resistance 7640
- Turnip flower**, bud initiation 1176
- Turnip growth substances**, cambial activity, root 8629
- Turnip nutrition**, NPK 5926
- Turnip pests**
 - aphids 4383
 - Ditylenchus dipsaci* 3878
- Turnip root**, cambial activity 8629
- Turnip seed**, production, steckling, size 7663
- Turnip soil**
 - moisture, nutrient absorption 5926
 - seedling emergence 4447
 - temperature, disease incidence 614
- Turnip varieties**
 - disease resistance, *Plasmiodiophora brassicae* 7640
 - Golden Ball, Pakistan 610
 - Pusa Chandrima 3656
- Tussilago farfara*, as medicinal plants 5538
- Tylenchorhynchus christiei*, azalea pests 2288
- T. claytoni*
 - azalea pests 2288
 - lawns and sports turf pests 2265
- T. dubius*
 - disease relationships, lawns and sports turf, pests 6196
 - lawns and sports turf, pests 2266, 6198
- Tylenchulus semipenetrans**
 - citrus pests 2394
 - annual report, USA 8051
 - control, cultural methods, citrus pests 4002
 - grapefruit pests, annual report, Cyprus 3980
 - okra pests 2394
 - orange pests 2395
 - pineapple pests 2394
 - population studies, decline association, citrus pests 8078
 - resistance
 - Citrus* spp., pests 3100
 - Severinia buxifolia*, pests 3100
 - rootstock resistance, citrus pests 4787
 - soil, fumigation, citrus pests 4787
 - tomato pests 2394
- Typhlodromus fallacis*, population studies, fungicides, apple 5737

- Typhlodromus* *contd.*
T. occidentalis, predator on, *Tetranychus telarius*, hop 7093
T. potentillae, predator on, *Panonychus ulmi*, apple, annual report, Netherlands 5697
T. rhenanus, predator on, *Brevipalpus californicus*, citrus 1489
T. spp., population studies, sprays, apple 957
Typhula inoarnata, lawns and sports turf, diseases 6195
T. ishkariensis, lawns and sports turf, diseases 6195
T. spp., strawberry diseases, stored runners 109
Tyrophagus longior, biological control, cucumber and gherkin pests 3685
Tythus mundulus, predator on, *Perkinsiella saccharicida*, sugar cane 1637
- Uganda**
 vegetables
 economics 5887
 growing 5887
- UK**
 apple
 economics 3341
 production and trade 3341
 apple varieties, register 34
 capsicum, growing 4530, 6036
 flora 434
 fruit, production and trade 4120
 horticultural crops, survey 4123
 pear, production and trade, economics 3342
 plum, growing, economics 6654
 small fruits
 economics 3343
 production and trade 3343
Ulex *spp.*, nutrition, nitrogen, container grown 267
 Ultrasonics, seed treatment, squash 4446
 Umbelliferae
 diseases, virus, incidence, German Federal Republic 6781
 flavonoids 3340
 seed, treatment, fungicides 3622
Uncaria gambir, annual report, Sarawak 3933
Ucinula necator
 control, grapevine diseases 7580, 8482
 grapevine diseases 1914, 1918, 2723
 annual report
 Italy 6714
 USA 7490
 incidence, foliar nutrition, minor elements, grapevine diseases 7568
 resistance, breeding and selection, grapevine diseases 5825
 Switzerland, grapevine diseases 5860
 varietal resistance, grapevine diseases 3584, 7546, 8563
 United Arab Republic, date, growing 6370
 Urea, treatment, sett, germination, sugar cane 1634
Urginea indica, sterols, content 1451
U. maritima
 bulb, anthocyanins, content 1453
 composition 9063–9064
 growing, Algeria 7116
 plant, morphology 7116
Urocystis cepulae, leek diseases 661
U. leimbachii, *Adonis* *spp.*, diseases 2350
U. magica
 control, onion diseases 7751
 onion diseases, annual report, Canada 2734
Urocystis *spp.*
 onion diseases
 annual report
 Canada 3603, 5883
 USA 7601
- Uromyces appendiculatus*
 annual report, East African community, bean (*Phaseolus*) diseases 5245
 bean (*Phaseolus*) diseases 4474
 annual report, Australia 5882
 fungicides, application, adjuvants, bean (*Phaseolus*) diseases 1215
 host histology, bean (*Phaseolus*) diseases 8689
U. croci, crocus diseases 3317
U. fabae, bean (*Vicia*) diseases 2042
- Uromyces* *contd.*
U. musae, varietal resistance, banana diseases 1540
U. phaseoli
 bean (*Phaseolus*) diseases 3707
 control
 bean (*Phaseolus*) diseases 8690
 dark treatment, bean (*Phaseolus*) diseases 5251
 heat treatment, bean (*Phaseolus*) diseases 5251
 host-pathogen relationships, bean (*Phaseolus*) diseases 4476
 resistance, bean (*Phaseolus*) diseases 2023, 2792
 varietal resistance, bean (*Phaseolus*) diseases 3708
U. phaseoli-typica, bean (*Phaseolus*) diseases 643
U. phaseoli typica, incidence, Brazil, bean (*Phaseolus*) diseases 5235
U. transversalis, gladiolus diseases 3317
Urtica dioica, leaf, organic acids, content 8594
U. urens, as weeds, vegetables 7648
Urticaria urens, cabbage 6795
- USA**
 agricultural, statistics 899
 apple, production and trade, estimation, mathematical model 7415
Benincasa hispida, growing 5944
 cranberry, growing 6687
 cucumber and gherkin, growing 5205
Cyamopsis *spp.*, economics 6858
 fruit trees and plants, varieties, register 5670
 gladiolus, economics 7004
 mint, essential oil, production and trade 2327
 nuts, varieties, register 5670
 pentstemon, growing 5414
 strawberry, growing, sub-tropics 4321
 tomato, production and trade 2853
- USSR**
 apricot, growing 4251
Aronia melanocarpa, growing 7487
 citrus, growing 9077
 cranberry, growing 7512
Dioscorea *spp.*, growing 5523
Fumaria officinalis, growing 8023
Inula grandis, growing 7111
 liquorice, growing 4768
 peach, growing 4251
 philadelphus, growing, for essential oil production 7082
- Ustilago scitaminea*
 East Africa, survey, sugar cane diseases 8220
 environmental factors, sugar cane diseases 6429
 plant thinning, sugar cane diseases 7245
 planting density, sugar cane diseases 7245
 seasonal susceptibility, sugar cane diseases 6429
 sugar cane diseases 4097, 4890
 annual report, USA 9221
 varietal resistance, sugar cane diseases 845, 4085, 6429, 6445–6446, 7231
 varietal susceptibility, sugar cane diseases 4884
U. spp.
 sugar cane diseases 422
 varietal resistance, sugar cane diseases 4086
U. striiformis, control, lawns and sports turf, diseases 5450
Uvariopsis congolana, alkaloids, content 1428
- Vaccinium** *spp.*
 altitudes, plant, growth 4318
 annual report, UK 3514
 flower, bud development 1061
 growing, USSR 4299
 growth, studies 1061
 leaf
 ascorbic acid, content 1869
 bud development 1061
 glycosides, content 1869
 tannins, content 1869
 medicinal use, leaf, harvesting time 1869
 nitrogen, absorption, water table 6686
 phosphorus, absorption, water table 6686
- Vaccinium* *spp.* *contd.*
 pollination 2690
 seed
 dormancy, breaking 5091
 germination
 light 5091
 temperature 5091
 treatment
 cold 5091
 fruit juice 5091
 stratification 5091
 soil
 aeration, water table 6686
 water table 6686
 yield, forecasting 1870–1871
 yields, statistical analysis, USSR 3526
- Valerian**
 annual report, Austria 347
 growing, as a medicinal plant 8046
 herbicides, leaf, chlorophyll, content, Patoran 8045
 hydrocarbons 3089
 weed control 3062, 8045
- Valerian diseases**
 annual report, German Federal republic 7063
Thielaviopsis *spp.*, 8047
Verticillium *spp.*, 8047
- Valerian root**, composition, valepotriates 6321
- Valerian seed**
 germination
 light, interaction, temperature 3978
 temperature 3978
 storage 3978
 viability 3978
- Valerianella* *spp.*, winter hardiness, German Federal Republic 7597
- Valsa cincta*, apricot diseases 63
- V. mali*
 boron nutrition, apple diseases 475
 nitrogen nutrition, apple diseases 475
 varietal resistance, apple diseases 475
- Vanadium**
 enzyme activity, leaf, spinach 2747
 proteins, metabolism, spinach 2747
- Vanda* *spp.*, mycorrhiza 5459
- Vanilla**
 annual report, Sarawak 3933
 breeding and selection, disease resistance 2321
 growing
 Malagasy Republic 2321
 Uganda 2321
 Malagasy Republic, annual report, France 754
- Vanilla bean**
 composition 2321
 drying, ovens 2321
- Vasates lycopersici*, tomato pests 4539
- Vegetables**
 air pollution
 injury
 nitrogen oxides 4130
 peroxyacetyl nitrate 4130
 plant responses 3306
 photochemical oxidants 3306
 alkaloids, content 2346
 amino acids, content 449
 annual report
 Belgium 1131
 Canada 2734
 UK 867, 6774
 Yugoslavia 3619
 ascorbic acid, determination 5901
 axillary bud, meristem, anatomy 2912
 breeding and selection 1941
 nutritional value 4370
 carbon dioxide, concentration, tolerance 6782
 chromosome numbers, atlas 5158
 copper, determination, ascorbimetry 605
 diseases
 book 3626
 control 5891
 book 3626
 France 4138
 German Democratic Republic 1691
 mycoplasma, review 5164
 survey, United Arab Republic 5892
 various, Togo 5599
 virus, alternative hosts, weeds 5894

Vegetables contd.

- disorders
 - book 3626
 - survey, United Arab Republic 5892
 - various, Togo 5599
- drying 22
- economics
 - Netherlands 2735
 - Uganda 5887
- fluorine, toxicity 4130
- fungicides
 - residues
 - determination
 - benomyl 3327
 - dichlozoline 8590
 - review 5891
- growing
 - book 6476
 - Bulgaria 3620-3621
 - Caribbean, annual report, Israel 3608
 - Central America, annual report, Israel 3608
 - economics, Netherlands 6775
 - German Democratic Republic 5155
 - under glass
 - economics 4122
 - Netherlands 4122, 6775
 - in greenhouses
 - mobile plastic 2738
 - plastic 2738
 - under plastic 6496
 - for processing 5900
 - tropics
 - annual report
 - France 3605
 - Israel 3608
 - book 5147
 - tunnels, types compared 1945
 - Uganda 5887
 - growth substances
 - metabolism, indole3-acetaldoxime 5898
 - responses, GA 4148
 - review 7611
 - seed, germination, review 4374
 - harvesting
 - book 5167
 - mechanical, for processing 5900
 - herbicides 3323
 - injury, nitriln 1140
 - tolerance
 - chlorpropham 6779
 - pronamide 6779
 - hydrocarbons, carcinogenic 5169
 - Indonesia 1674
 - insecticides
 - residues 1699
 - plant 4141
 - tamaron 4143
 - iron, determination, ascorbimetry 605
 - irrigation
 - annual report, Western Samoa 7602
 - sprinkler, economics 1141
 - trickle 1046
 - water
 - composition
 - boron 5163
 - chlorine 5163
 - sodium 5163
 - light, quality, spectral, latitude 5678
 - nitrate, content, review 606
 - nutrition
 - annual report, German Federal Republic 7600
 - bark 5161
 - boron, deficiency 6499
 - FYM 5161, 5889
 - general
 - colloquium 6479
 - leaf analysis 5681
 - green manures, types compared 5889
 - leaf analysis, annual report, New Zealand 5152
 - magnesium, deficiency, plant sensitivity 5162
 - nitrogen 5161
 - sources, residues value 866
 - phosphorus 2739
 - potassium 2739
 - sap analysis, annual report, UK 1934
 - zinc, toxicity 1952
 - nutritional value
 - breeding and selection 4370

Vegetables contd.

- nutritional value contd.
 - nitrate 606
- organic acids, determination 5901
- ozone, injury 4130
- packing 8312
 - book 5167
- parasitic plants, book 3626
- pests
 - Arvicola terrestris*, control 8306
 - biological control, *Bacillus thuringiensis* 447
 - book 3626
 - control
 - book 3626
 - France 4138
 - German Democratic Republic 1691
 - Meloidogyne* spp. 4931
 - nematodes 446
 - review, France 2741
 - Phyllotreta* spp., annual report, Sarawak 3609
 - Plutella xylostella*, annual report, Sarawak 3609
 - slugs 1329
 - survey, United Arab Republic 5892
 - various, Togo 5599
 - voles 8306
 - control 8306
 - white fly, annual report, German Federal Republic 7598
 - photoperiodism 2881
 - latitude 5678
 - pigments 5691
 - processing
 - drying, methods compared 4388
 - insecticides, residues 1699
 - research, French West Indies 5668
 - root, mucilaginous layer 4938
 - rotations, annual report, German Federal Republic 7600
 - seed
 - germination, growth substances, review 4374
 - grading, weed seed, identification 2736
 - oil, biosynthesis 3336
 - quality, symposium 4372
 - sowing
 - direct, pelleted 1943
 - drills 1138
 - mechanical 1138
 - programme, continuous production 1163
 - tape 1138
 - treatment
 - growth substances, review 4374
 - pelleted 1943
 - seedling
 - planting, mechanical 1138
 - production, economics, Hungary 6776
 - raising
 - containers 1138
 - pots, made from plastic films 2865
 - soil
 - fumigation, methyl bromide, residues 1953
 - salinity, plant, tolerance 2740
 - storage
 - annual report, UK 2743
 - book 5167
 - buildings, cold 1955, 4386
 - cold 4386
 - containers, cooling rate 4385
 - review 7612
 - sulphur dioxide, injury 4130
 - symposium 5881
 - temperature, latitude 5678
 - tissue culture, anther, annual report, UK 3612
 - transport 8312
 - book 5167
 - vitamins, content 3339
 - weed control 1140, 1681, 4924, 5894, 6780
 - book 3626
 - peat soils, review 7603
 - weeds 6491
 - alternative hosts, virus diseases 5894
 - Venezuela**
 - Annona muricata*, growing 8119
 - avocado, growing 8119
 - banana, growing 8119
 - citrus, growing 8119

Venezuela contd.

- fig, growing 8119
- grapevine, growing 8119
- guava, growing 8119
- mango, growing 8119
- papaw, growing 8119
- peach, growing 8119
- pineapple, growing 8119
- sapodilla, growing 8119
- Venturia inaequalis**
 - aerial spraying, apple diseases 7372
 - air pollution, apple diseases 4130
 - apple diseases 45, 53, 473, 954, 1747, 1751, 5731, 5734, 5751
 - annual report
 - Canada 1719, 2515, 3370, 8314
 - German Federal Republic 4943, 6506
 - Netherlands 5697
 - UK 903, 4172, 8318
 - control
 - apple diseases 4212, 6560, 6568, 7371, 8305, 8391, 8393, 8482
 - fungicides, mite populations, apple diseases 5737
 - post-harvest sprays, apple diseases 5733, 5735
 - forecasting, apple diseases 1751, 4212
 - incidence, apple diseases 7383
 - leaf invasion, histological studies, apple diseases 474
 - Malus* spp., diseases, annual report, UK 6128
 - post-harvest foliar sprays, apple diseases 477
 - post-harvest sprays, apple diseases 7389
 - resistance
 - apple diseases 44, 5736
 - annual report, Canada 2515
 - varietal resistance, apple diseases 1722, 3374, 3377, 7336, 8340, 8380
- V. nashicola**, resistance, breeding and selection, pear diseases 6642
- Venturia pirina**
 - control, pear diseases 4212, 8393
 - pear diseases, annual report, UK 8318
 - post-harvest sprays, pear diseases 7389
 - soil pH, pear diseases 5785
- Vepris madagascariensis**, essential oil, composition 9007
- Veratrum** spp., alkaloids, biosynthesis 3057
- Verbascum** leaf, stomata, mechanism 354
- Vernonia amygdalina**, plant, composition 786
- V. spp.**, flavonoids, extraction 2371
- Verticillium albo-atrum**
 - Aconitum napellus*, diseases 3963
 - apricot diseases 63
 - avocado diseases 7122
 - control
 - cultural methods, hop diseases 3325
 - hop diseases 7091
 - strawberry diseases 7540
 - tomato diseases 6086
 - fruit trees and plants, vegetables, diseases 3325
 - geranium diseases 5409
 - hop diseases
 - annual report
 - Belgium 6272
 - German Federal Republic 340
 - UK 9009
 - host enzyme activity, tomato diseases 8691
 - incidence, hop diseases 7092
 - nematode relationship, tomato diseases 243
 - nitrogen nutrition, hop, annual report, German Federal Republic 7087
 - okra diseases, annual report, USA 8585
 - resistance
 - enzyme activity
 - hop diseases 8691
 - tomato diseases 8691
 - soil
 - drenches, strawberry diseases 3550
 - fumigation, antirrhinum diseases 2206
 - symptoms, geranium diseases 8869
 - tomato diseases 5350
 - varietal resistance
 - hop diseases 3956
 - tomato diseases 7799

Verticillium contd.**V. dahliae**

- absinth diseases 4739
- almond diseases 7329
- annual report, German Federal Republic 7087
- cacao diseases 387, 7182
- fruit trees and plants, vegetables, diseases 3325
- geranium diseases 5409
- hop diseases
 - annual report
 - Belgium 6272
 - German Federal Republic 340
- host-parasite relationships, tomato diseases 3325
- host-pathogen relationships, apricot diseases 1805
- incidence, hop diseases 7092
- irrigation, capsicum diseases 4538
- light intensity, capsicum diseases 4538
- mango diseases 4066
- okra diseases 387
- resistance, apricot diseases 1805
- seed-borne, spinach diseases 6785
- soil

- amendments, strawberry diseases 110
- fumigation, strawberry diseases 3325
- micro-organisms, control, root exudate, onion 2085

- strawberry diseases 111
 - annual report, UK 7489
- toxins, plum diseases 5062
- varietal resistance, temperature, strawberry diseases 3325

V. hemileiae, fungal parasite of, *Hemileia vastatrix*, coffee 1580**V. intertextum**, fungal parasite, *Pentalonia nigronervosa*, cardamoms 6253**V. malthousei**

- control, herbicides, mushroom diseases 8824
- mushroom diseases 4601, 8825
- soil steaming, mushroom diseases 6956

V. spp.

- apricot diseases 8425
- control, hop diseases 6279
- fungal parasite, *Hemileia vastatrix*, coffee 7194
- hop diseases, annual report, German Federal Republic 7064
- hosts 62
- red currant diseases, annual report, German Federal Republic 4298
- resistance
 - annual report, USA 1130
 - strawberry, annual report, UK 1856
 - tomato diseases, annual report, Netherlands 6772
- seed treatment
 - capsicum diseases 6899
 - eggplant diseases 6899
- strawberry diseases
 - annual report
 - Belgium 1060
 - UK 1856
- symposium 3325
- tolerance, hop diseases, annual report, UK 3954
- tomato diseases
 - annual report
 - Australia 5882
 - USA 4368
- valerian diseases 8047
- varietal resistance
 - strawberry, annual report, USA 1440, 5078
 - strawberry diseases 7524-7525
 - tomato diseases 5337
- vegetables, diseases, annual report, Canada 2734

V. vilmorinii, varietal resistance, *Aster* spp., diseases 6992**Vetiver**

- essential oil, nutrition, annual report, Sarawak 3933
- herbicides, toxicity, picloram, dicamba 2495
- weed control 2495

Vetiveria spp.

- diseases, *Curvularia trifolii* 336
- essential oil, production, economics 1417
- growing, peat 1417

Vetiveria spp. contd.

- nutrition, NPK 1417

Viburnum

- annual report, USA 1441, 6129, 8834
- growing
 - in containers, nutrition 7062
 - peat, nutrition, nitrogen 8941
- pollen, germination, boron nutrition 3000

Viburnum nutrition

- boron 7062
 - pollen germination 3000
- copper 7062
- iron 7062
- manganese 7062
- molybdenum 7062
- zinc 7062

Viburnum propagation

- cuttings
 - frame 6134
 - media 2312
 - photoperiodism 1401
 - treatment, growth substances 2312

Viciaceae, proteins 3723**Vigna** spp., growing, as an intercrop, pineapple 9198**Vinca major**, flower, nectary, structure 8009**V. spp.**

- chlorophyll, content, nitrogen nutrition 1442
- disorders, chlorosis, nitrogen nutrition 1442
- ground cover plants 710
- growth substances, chlorophyll, content, chlormequat 1442
- herbicides, injury 1323
- mycoplasma, indicator plants 290, 6270
- nutrition
 - iron 1442
 - nitrogen, sources, chlorosis 1442
- weed control 710

Vincetoxicum officinale, flavonoids 9065**Viola**

- breeding and selection 3862
- chlorophyll, content, phytochrome relationships 4937
- phytochrome, -chlorophyll relationships 4937

Virus

- alternative hosts, weeds, vegetables, diseases 5894
- control
 - antibiotics
 - greening, lime (*Citrus*) 9090
 - little leaf, eggplant 8760
 - cross protection
 - chlorotic-necrotic ring spot, by chlorotic ringspot 3359
 - soybean mosaic, by bean pod mottle, bean (*Phaseolus*) 4472
 - tobacco mosaic
 - tomato 2119, 5348
 - annual report, Irish Republic 6770
- cultural methods, mosaic, cucumber and gherkin 3682
- growth substances, cherry, annual report, Canada 8314
- heat treatment
 - apple 2537
 - carnation 2920
 - cherry 1809
 - chrysanthemum 2190
 - citrus 7141
 - fruit trees and plants 1715
 - grapevine 7554
 - annual report, German Federal Republic 4298
 - hydrangea 4722, 7054
 - lemon 6328
 - lettuce 7631
 - mushroom 7831, 7833
 - peach 1809
 - sugar cane 1634, 7240, 8223, 8225, 8230, 9252
 - tree fruits 7320
- hot water treatment, sugar cane 422, 6441
- inoculation, tobacco mosaic, tomato 7792-7793
- review 888

Virus contd.**control contd.**

- seed, treatment, bean (*Phaseolus*) diseases 175
- shoot-tip culture
 - bulbs, annual report, Netherlands 2219
 - carnation 2919-2920
 - chrysanthemum 1331, 2190
 - grapevine 7554
 - hydrangea 7054
 - narcissus 7012
 - raspberry 1864
 - soil, sterilization, peach diseases 1824
 - tea catechins 3290
 - temperature 241
 - alternating 16
 - thiouracil, papaw 401
 - tissue culture, grapevine 7554
- detection
 - aerial photography, annual report, USA 600
 - biochemical
 - fiji disease virus, sugar cane 420
 - mosaic, bean (*Phaseolus*) 3704
 - necrotic ringspot, cherry 4236
 - prune dwarf, cherry 4236
 - fruit trees and plants 1715
 - grafting using nurse roots, apple 3406
 - propagating material, ornamentals 2916
- root chip inoculation
 - Prunus* stem pitting virus, peach diseases 512
 - stem pitting virus, *Prunus* spp. 1825
- serological, *Prunus* necrotic ring spot, cherry, annual report, German Federal Republic 6504
- toluidine blue metachromasia, *Cyamopsis tetragonoloba* 2807
- German Federal Republic, grapevine 3581
- grafting, union, development, cherry diseases 999
- host
 - reactions
 - carbohydrates
 - content, *Luffa* spp. 3684
 - metabolism, tomato 3803
 - chlorophyll content, *Luffa* spp. 3684
 - chloroplast, structure, sweet basil 1409
 - enzyme activity
 - capsicum 2846
 - papaw 3246
 - growth
 - apple, annual report, UK 903
 - fruit trees and plants 2528
 - growth substances
 - GA, tomato 3815
 - NAA, tomato 3815
 - leaf
 - structure
 - basil, sweet 1410
 - cabbage, chinese 1410
 - nitrogen, metabolism, capsicum 2846
 - nucleic acids, biosynthesis, bean (*Vicia*) 200
 - phosphates, translocation, tomato 1294
 - phosphorus, content, tomato 3804
 - photosynthesis, *Luffa* spp. 3684
 - proteins, pea 2816
 - respiration
 - apple 6565
 - Luffa* spp. 3684
 - transpiration, grapevine 2722
- host reactions
 - amino acids, content, zinnia 8881
 - chlorophyll degradation, vegetables 1259
 - electrical resistance, apple 7376
 - enzyme activity, apple 8402
 - nutrients, content, zinnia 8881
- identification
 - grapevine 3581
 - ornamental plants, annual report, German Federal Republic 6959
- incidence, rootstock-scion relationships, avocado 9070
- indexing
 - apple 8389-8390

Virus contd.indexing *contd.*

- cherry 4236
- fruit trees and plants 7321
- peach 3473
- strawberry, annual report, Canada 6667

indicator plants

- apple, annual report, Netherlands 5698
- apple varieties, proliferation 3406
- apricot 3359
- Blumea lacera* 3966
- citron, exocortis virus, citrus diseases 2386
- cucumber and gherkin 3359
- Hyoscyamus niger*, mosaic virus, hippeastrum diseases 1368
- Solanum khasianum* 3966

inhibition

- fungus extracts, *Aspergillus flavus*, bean (*Phaseolus*) 4473
- plant extracts, *Datura* spp., bean (*Phaseolus*) diseases 642

isolate, purification, *Prunus* necrotic ring

- spot virus 6633

nomenclature 1693

pest control

- Cydia pomonella*
- apple 8395
- apple pests, annual report, Australia 450

- Pieris rapae*, cabbage 1172, 7657

- Trichoplusia ni*, cabbage 1172, 7657
- pollen-borne, *Prunus* ringspot, stone fruits 7475

resistance, induced 3316

rootstock-scion relationships, cherry 999

seed-borne

- mosaic, *Solanum khasianum* 3086
- seed-borne mosaic, pea 7729

- tomato ringspot, raspberry 8490

- yellow dwarf, onion 6881

soil-borne

- bulbs, annual report, Netherlands 2219
- stem pitting
- apricot 5768
- peach 5768

- tobacco mosaic

- tulip 7910

- Tulipa* spp. 7910

spread, aphids, annual report, UK 3514

transmission

- dark treatment, apple 470
- tools, decontamination, citrus 3125

vectors

- Aceria sacchari*, streak, sugar cane 6443

- Amphorophora rubi*, *Rubus* viruses, raspberry 4317

- annual report, USA 5077

- aphids 3316

- control, lily 2248-2249

- mosaic

- cauliflower and broccoli 2759

- lettuce, annual report, German Federal Republic 7598

- papaw, annual report, USA 6383

- sugar cane, annual report, USA 6383

- turnip mosaic, statice 2936

- Aphis craccivora*, subterranean clover stunt, yellow mosaic, legumes 6846

- A. gossypii*

- abaca mosaic virus, manila hemp 2437

- subterranean clover stunt, yellow mosaic, legumes 6846

- Aulacorthum solani*, *Rubus* viruses, raspberry 4317

- Bemisia tabaci*

- leaf curl, tomato 8786

- yellow leaf curl, tomato 3808

- Ceratomyxa ruficornis*, rugose mosaic, bean (*Phaseolus*) 6845

- Chorizococcus lounsburyi*

- Hippeastrum*-mosaic, amaryllis, annual report, Netherlands 6961

- Circulifer tenellus*, curly top, tomato 2871

- Diabrotica adelpha*, rugose mosaic, bean (*Phaseolus*) 6845

Virus contd.vectors *contd.**Diabrotica* *contd.*

- D. balteata*, rugose mosaic, bean (*Phaseolus*) 6845

- Hyperomyzus lactucae*, necrotic yellows, lettuce 7631

- insects, apple, annual report, USA 24

- Lipaphis erysimi*, radish diseases 1180

- Macrosiphum euphorbiae*, subterranean clover stunt, yellow mosaic, legumes 6846

- mealybugs, swollen shoot virus, cacao 1551

- Myzus persicae*

- beet western yellows, lettuce 1969

- potato virus Y, capsicum 6040

- radish diseases 1180

- subterranean clover stunt, yellow mosaic, legumes 6846

- tobacco etch, capsicum 6040

- turnip mosaic virus, cauliflower and broccoli 1168

- nematodes, review 2502

- Olpidium brassicae*

- cucumber systemic necrosis

- cucumber and gherkin 4453

- lettuce 4453

- Paralongidorus* spp., grapevine, annual report, German Federal Republic 4298

- Pentalonia nigronervosa*

- bunchy top, banana 9132

- mosaic, cardamoms 6251

- Perkinsiella saccharina*, fiji disease, sugar cane 421, 1633

- Rhopalosiphum maidis*, abaca mosaic virus, manila hemp 2437

- Toxoptera citricidus*, tristeza, citrus 4798

- Trichodorus* spp., rattle virus, tulip 2258

- Xiphinema americanum*

- stem pitting virus, peach 1822

- tomato ringspot, narcissus 2254

- X. diversicaudatum*

- arabis mosaic

- carnation, annual report, Netherlands 6961

- Cymphomandra betaceae* 1528

- hop 3041

- X. index*, control, grapevine 5133

yield

reduction

- apple 7375

- cucumber green mottle mosaic, watermelon 8650

- strawberry 4330

- tree fruits 7320

Virus-tested plants

EMLA scheme

- fruit trees 7320

- fruit trees and plants 2528

- ornamental trees and shrubs 7320

- German Democratic Republic, fruit trees and plants 7321

- nursery stock, fruit trees and plants, France 2524

propagation

- citrus diseases 794

- fruit trees and plants 1715

- gooseberry, annual report, UK 7489

- strawberry 7536

- annual report, UK 7489

- tree fruits 4948

- annual report, Belgium 2517

- Special Stock Certification Scheme

- fruit trees 7320

- ornamental trees and shrubs 7320

- tree fruits, annual report, German Federal Republic 6505

- Viscaria candida*, tissue culture, growth substances, determination 7026

- Vitamin A** (see Carotene)

Vitamin B

applied

- growth substances, injury prevention, bean (*Phaseolus*) 7717

- protein, content, pea 6014

- seed, *Rosa* spp. 2990

content

fruit

- Hippophae* spp. 6238

Vitamin B *contd.*content *contd.*fruit *contd.*

- Ziziphus jujuba* 5667

- growth substances, bean (*Phaseolus*) 7717

- root, beetroot 5172

Vitamin C (see Ascorbic acid)**Vitamin E**

content

- fruit, *Hippophae* spp. 6238

- seed, stone fruits 8424

Vitamin P

content

fruit

- Aronia melanocarpa* 7487

- latitude, apple 7417

- varietal differences, apple 7417

processing

- raspberry 112

- strawberry 112

- Vitamin PP**, applied, seed, *Rosa* spp. 2990

Vitamins

content

- grapevine fruit 1894

- nitrogen nutrition, spinach 865

- Phoenix* spp. 6372

- virus, control 888

- Vitis berlandieri*, hybrids, as a rootstock, grapevine 1095

- V. champini**, varieties, as a rootstock, grapevine 1095

- V. spp.**, pests, *Hemicricnemoides chitwoodi* 5132

- Voacanga globosa*, alkaloids 4779

Volatile constituents

fruit 5793

- passion fruit 2429

Voles

fruit trees and plants

- pests 8306

- annual report, German Federal Republic 6505

- vegetables, pests 8306

- Volvaria** spp., edible fungi 6122

Volvariella spp.

- edible fungi 2151

- growing, media 2151

V. volucae

- compost, rice straw 8833

- edible fungi 2906, 4603, 5382, 6958

- growing 4603

- under plastic 8833

- growing on, cotton waste 5382

- morphology 8832

- mycelium, growth 5383-5384

Vriesia spp.

- flower, bud initiation, growth substances, NAA 1372

- growth substances, flower, bud initiation, NAA 1372

nutrition

- boron 7931

- copper 7931

- Hakaphos blau 7931

- iron 7931

- molybdenum 7931

- potting composts

- amendments 7931

- types compared 8919

Wallflower

- steroids, biosynthesis 1435

- weed control, annual report, UK 8838

Walnut

annual report

- German Federal Republic 4943

- USA 25

- dye plants 3943

- flowering, secondary 2664

growing

- high altitudes, India 7311

- terraced slopes, Caucasus 1043

- harvesting, fruit, loosening 6662

- irrigation, requirements 4160

- nutritional value, fatty acids 5069

- Walnut diseases**
 Australia 6518
Marssonina juglandis, varietal resistance 5066
- Walnut flower**, bud development, growth substances, content 2663
- Walnut fruit**, loosening, growth substances 6662
- Walnut growth substances**
 endogenous
 bud 2663
 flower 2663
 fruit 2663
 leaf 2663
 fruit, loosening, ethephon 6662
 plant
 morphology
 IAA 2663
 MH 2663
- Walnut leaf**, bud development, growth substances, content 2663
- Walnut, nut**
 fatty acids, content 5069
 quality, evaluation 5070
- Walnut nutrition** 5068
 deficiency symptoms 99
 leaf, analysis 99
- Walnut pests**
 Australia 6518
 review, Bolivia 5671
- Walnut plant**, morphology, growth substances 2663
- Walnut propagation**
 grafting
 bench grafting 3513
 graft storage 3513
 mechanical 4293
 time of 96, 6666
 union, anatomy 5067
 whip-grafting 3513
- Walnut rootstocks**
 comparative trials 7485
Juglans manschurica 8480
J. niger 8480
J. regia 8480
 USSR 8480
 compatibility 5067
Juglans spp. 7485
- Walnut seed**
 germination, storage, methods 1042
 treatment, methods compared 1042
- Walnut varieties** 95
 Mirkovski 5066
 nutritional value 5069
- Walnut wood**, polyphenols, content 526
- Water**
 content, drought resistance, peach 7444
 movement
 light, pea 3737
 tomato, excised roots 7805
 trees and shrubs 2369
 supply, snow cover, grapevine 8541
- Water potential**
 leaf
 diseases, *Fusarium* spp., tomato 6923
 kale 5930
 measurement 7288
 apple, 1774
 bean (*Vicia*) 1222
 equipment 4919
 root hydrostatic pressure, capsicum 8755
 plant
 growth substance-induced fruit abscission, olive 6378
 measurement, chrysanthemum 6147
 nutrient solution, concentration, carnation 5401
 root diseases 3316
 soil, root diseases 3316
 xylem, measurement 7288
- Water relations** 3296 (*see also* Transpiration)
 anti-transpirants
 growth substance-induced fruit abscission, olive 6378
 sugar cane 4102
 apical dominance, bean (*Phaseolus*) 8698
 atmospheric relationships, annual report, Australia 6480
 chlorosis, apple 8382
 disease incidence, *Cephalosporium sacchari*, sugar cane 7244
- Water relations** *cont'd.*
 dormancy, fruit trees and plants 6521
 flower bud
 initiation
 lemon 7150
 morning glory, report, Australia 3831
 raspberry 1058
 frost resistance
 apple 6574
 Prunus spp. 7061
 fruit, size, diurnal changes, orange 3140
 grafted and own-rooted plants compared, rose 4713
 growth studies
 bean (*Phaseolus*) 3713
 tea 4112
 growth substances
 content, pea 3743
 tomato 3296, 6100, 6102
 leaf
 copper, content, apple 1742
 fall, olive 1519
 leaf browning, pear 516
 leaf tearing
 Musa spp. 382
 Strelitzia spp. 382
 light, sugar cane 4102
 lysimeters
 geranium 4128
 sugar cane 427
 tea, annual report, East Africa 8188
 minor elements
 nutrition
 Nicotiana spp. 1343
 petunia 1343
 nutrition
 melon (cantaloup and musk) 2773
 pea 213
 osmotic pressure, nutrient solution, soilless culture, grapevine 6749
 photosynthesis, peach, annual report, Australia 450
 physiology
 crop yield 4
 sugar cane 1645
 tea 4112
 pigment, content, tomato 254
 plant
 amino acids, content, vegetables 3628
 proteins, content, vegetables 3628
 seed treatment
 melon (cantaloup and musk) 7677
 tomato 6062
 plant composition, mint 4743
 plant mechanisms, electrical analogue 2509
 planting, apple 1773
 premature decline, plum 7467
 pruning and training, apple 5741
 relative humidity
 apricot 8426
 culture solution osmotic potential, mustard 8985
 sugar cane 4102
 root, vegetables 1223
 root hydrostatic pressure, capsicum 8755
 rootstocks, apple 5741
 salinity, bean (*Phaseolus*) 2790
 seasonal variations, apple nutrition 36–37
 seed, germination, pea 1227, 6860
 shoot, sugars, content, grapevine 5867
 soil relationships, annual report, Australia 6480
 stomata
 guard cells, bean (*Vicia*) 6856
 movements, apricot 8426
 study technique
 phosphorus-32 beta gauge
 small fruits 8518
 strawberry 8518
 temperature
 apple 6537
 apricot 8426
 sugar cane 4102
 tomato 7804
 varietal behaviour, apple 2540
 winter hardness, apple 6574
- Watercress**
 cadmium, determination 4389
- Watercress** *cont'd.*
 growing
 hydroponically as a non-aquatic plant 1988
 with reduced water flow 1988
 lead, determination 4389
- Watercress growth substances**, shoot, growth, GA 3676
- Watercress nutrition**
 sulphur 1989
 plant, flavour 1989
- Watercress plant**
 flavour 1989
 sulphur nutrition 1989
- Watermelon**
 annual report, USA 1935, 4368, 8585
 chlorophyll, content, light 7690
 cucurbitacin, content, pest resistance 1194
 enzyme activity
 light 7690
 seedlings 8661
 flowering
 date
 growth substances 8666
 potassium nutrition, phosphorus nutrition 6816
 growing, under plastic, spring harvesting 3678
 hybrids 8644
 insecticides, injury, phosvel 6824
 light
 chlorophyll, content 7690
 enzyme activity, cotyledons 7690
 lipids, content 7690
 lipids, content, light 7690
 mulching
 bitumen, spring harvesting 3678
 plastic 7682
 mutants 4441
Orobanche spp.
 control 8648
 growth substances 5210
 planting, spacing, seed production 1186
 pollination, flower, biology 4461
 seedling
 growth
 light 7690
 seed position in fruit 6061
 seed shape 6061
 seed size 6061
 stomata, movements 8657
 transpiration, anti-transpirants, stomatal responses 8657
 weed control 623, 629, 6778, 6813
- Watermelon diseases**
 cucumber green mottle mosaic
 symptoms 8650
 yield reduction 8650
 cucumber green mottle mosaic virus 1999
Erwinia spp. 2769
 varietal resistance 7675
Fusarium oxysporum
 f. niveum
 soil, inoculum 2771
 varietal resistance 6805
 mosaic virus 1189
Pseudomonas lachrymans 5219
P. spp. 2769
- Watermelon flower**
 biology 4461
 bud initiation, growth substances, ethephon 633
 opening
 time 4461
 seasonal variations 3690
- sex**
 growth substances 8666
 seasonal variations 3690
- Watermelon fruit**
 amino acids, sugars, content 6834, 8667
 number, growth substances 8666
 sugars, content 8667
- Watermelon growth substances**
 flower
 sex
 chlormequat 8666
 ethephon 8666
 TIBA 8666
 flower bud, initiation, ethephon 633
 flowering, date, ethephon 8666

Watermelon growth substances contd.

- fruit
 - number
 - chlormequat 8666
 - ethephon 8666
 - TIBA 8666
 - Orobancha* spp., control, MH 5210
 - stomata, movements 8657

Watermelon nutrition

- calcium, deficiency, annual report, German Federal Republic 7599
- nitrogen, sources, sulphur-coated 3683
- NPK 3683, 6816
- potassium, sources, sulphur-coated 3683

Watermelon pests

- Agriotes* spp., seed, treatment 2002
- aphids 631
- Aulacophora foveicollis*, varietal resistance 1194
- mites 631
- thrips 631
- Trichoplusia ni*, control 6824

Watermelon rootstocks, *Lagenaria siceraria*, disease incidence 1999**Watermelon seed**

- drying, silica gel 1137
- germination 5207
- sowing, orientation 6061
- oil, extraction 1184
- production
 - planting, spacing 1186
 - potassium nutrition, phosphorus nutrition, nitrogen nutrition 6816
- storage 1185
- treatment
 - hypertonic salt solution, wafering 6061
 - insecticides 2002

Watermelon varieties

- Allsweet 4445
- annual report
 - India 3607
 - Sarawak 3609
 - Arka Tinda 8644
- comparative trials
 - annual report, Australia 7596
 - USA 5946
- disease resistance
 - Erwinia* spp. 7675
 - Fusarium oxysporum*, f. *niveum* 6805
- flower, sex 3690
- Stocks 647 7676

Watsonia diseases, annual report, Netherlands 2219**Wax**

- biosynthesis
 - fruit, citrus, annual report, Australia 4782
- inhibition, EPTC, cabbage 1136
- composition
 - fruit, plum 5064
 - leaf, *Desmodium* spp. 3055
- removal
 - leaf
 - cabbage 1136
 - growth substances, absorption, pear 5054
 - herbicides, bean (*Phaseolus*) 8684
- structure
 - fruit
 - apple 922, 6524
 - cherry 2618

Wax coatings

- chestnut, annual report, USA 25
- fruit
 - citrus 3154, 4809
 - injured, citrus 3154
 - mango 8163
 - mechanical injury resistance, citrus 9103
 - raspberry 5811
- fungicides
 - application 2404
 - tomato 6105
- graft union protection, apple 5714
- growth substances
 - application
 - 2,4-D, citrus 1506
 - GA, apple 1797
- sett, sugar cane 6430
- storage
 - apple 8412
 - banana 4044, 5606
 - cucumber and gherkin 5205, 5970

Wax coatings contd.

- storage contd.
 - papaw 8171

Wedelia spp.

- growth substances
 - dwarfing
 - MH-30 1384
 - SADH 1384

W. trilobata, ground cover plants, growth retardants 6157**Weed control**

- Agropyron repens*, rhubarb, annual report, UK 5885
- bean (*Phaseolus*) 167
- biological 4139
- book 7277
- Convolvulus* spp., grapevine 5839, 6731-6732
- cover crops
 - coconut 9147
 - coffee 1571
- Cynodon* spp., grapevine 6731
- ditch banks, sugar cane, annual report, USA 1530
- drains, tea 4896
- fire-breaks, sugar cane 6434
- high density planting
 - apple 464
 - cacao 8133
- Imperata cylindrica*, coconut 9147
- irrigation channels, sugar cane, annual report, USA 1530
- limited, peach 79
- methods compared
 - grapevine 5839, 6732
 - leaf, composition, apple, annual report, Netherlands 5697
 - storage disorders, apple, annual report, Netherlands 5697
- mulching, tea 7268
- nurseries
 - apple 2561, 4188
 - plum 4188
 - rubber 7225, 8180, 9211
 - tree fruits 7316, 7357
 - walnut 97
- pest incidence, *Pratylenchus penetrans*, peach 7452
- Ranunculus* spp., grapevine 5839
- seed beds, vegetables 2078
- vegetables, annual report, Irish Republic 1939

Weeds

- alternative hosts
 - virus diseases
 - lettuce 7631
 - vegetables 5894
- aquatic
 - control 437
 - review 6492
- communities 6491
- competition
 - cabbage 1981
 - container-grown plants, holly 4693
 - onion 6879, 7748
 - annual report, German Federal Republic 7599
 - orange 8066
 - sugar cane 8204
- as ground cover plants, grapevine 7560
- identification 6491
- mulch, peach 4256
- seed
 - identification, seed grading, vegetables 2736
 - seed sorting, air flow, vegetables 4373

Weigela

- breeding and selection, annual report, Netherlands 4604
- cold, resistance, photoperiodism 5485
- light
 - far-red, cold resistance 5485
 - red, cold resistance 5485
- photoperiodism, cold resistance 5485
- Weigela* propagation, cuttings, frame 6134
- Weigela root**
 - development, soil temperature 3925
 - growth, soil temperature 3925
- Weigela soil**
 - temperature
 - root development 3925
 - root growth 3925

West Africa, oil palm, production and trade 5634**West Pakistan, medicinal plants, survey 5514****White currant**

- economics
 - EEC 3343
 - UK 3343
- fungicides
 - injury
 - copper oxychloride 4308
 - zineb 4308
 - residues
 - fruit
 - benomyl 4308
 - mancozeb 4308
 - maneb 4308
- production and trade
 - EEC 3343
 - UK 3343

White currant diseases

- Drepanopeziza ribis*, varietal resistance 4308
- Gloeosporium* spp., varietal resistance 1048
- Mycosphaerella ribis*, varietal resistance 4308
- White currant varieties**
 - disease resistance
 - Drepanopeziza ribis* 4308
 - Mycosphaerella ribis* 4308

Wind

- damage
 - citrus 1473-1474
 - fruit, citrus, annual report, Australia 4782
 - orange 1474
 - pruning and training, lemon 3992
 - strawberry 1877
 - trees and shrubs 2979
- protection
 - plastic films
 - grapevine 1901
 - holly 7037
 - respiration
 - bean (*Phaseolus*) 5254
 - magnolia 5254
 - pea 5254
- water relations, cucumber and gherkin 5959

Windbreaks

- aerodynamics 4923
- for arid regions 4923
- bamboo plants, citrus 1473
- cherry 4294
- fruit trees and plants 7315
- Malus* spp. 3930
- microclimate 11, 4923
- peach 4294
- for pear, disease incidence 85
- plants for 7315
- plastic
 - carrot 5373
 - strawberry 7531
- pollination, apple 4222
- siting 7315
- Sorbus* spp. 4294
- value 4923, 7315
- walnut 4294

Winter hardiness (see also Frost)

- bud dormancy, apple 6575
- cherry 5020
- citrus, annual report, USA 2375
- containers, types compared, holly 6214
- desiccation, blueberry 6688
- dormancy, fruit trees and plants 6521
- flower bud initiation, cherry 8443
- grafting method, apple 8352
- leaf removal
 - apricot 5756
 - fruit trees and plants 6521
- measurement
 - apple 6539
 - strawberry 8507
- nitrogen, content, *Stenotaphrum* spp. 2179, 5448
- nitrogen nutrition
 - blueberry 7515
 - cherry 6617
 - holly 2311
 - pyracantha 2311
- peach 5020
- pest damaged plants, raspberry 2684

- Winter hardiness** *contd.*
 photoperiodism, tree fruits, annual report, Canada 8314
 pome fruits, annual report, USA 24
 raspberry 2684
 rootstocks, apple 7352
 seed dormancy, apple 2542
 small fruits, annual report, USA 5077
 sugars, content, vegetables 7662
 temperature, tree fruits, annual report, Canada 8314
 trees and shrubs 1382
 varietal differences
 anemone, annual report, UK 3834
 apricot 5756
 black currant 8484
 grapevine 7551, 7559, 8539
 hazel 5025
 pear 5045
 rose 5473
 water relations, apple 6574
- Wisteria**
 pterocarpanoids 6233
 taxonomy, chemotaxonomy 6233
- Work studies**
 grafting, grapevine 4339
 packing, flowers, rose 4704
 planting, tulip 1317, 8904
 pricking out, seedlings, tulip 1317
- Wound dressings**, fruit trees and plants 8327
- Wound healing**
 cherry 8433
 enzyme activity, coleus 280, 307
 growth substances, fruit trees and plants 8327
 treatments
 Santar
 apple 4207
 pear 4207
- Xanthium** *spp.*
 electrical activity 3847
 flower, bud initiation, photoperiodism 1347
 photoperiodism, flower bud initiation 1347
- Xanthomonas albilineans**
 control, sugar cane diseases 8226
 sugar cane diseases 423
 annual report
 Australia 9219
 South Africa 7230
 varietal resistance
 sugar cane, annual report, Guyana 9220
 sugar cane diseases 4084
- Xanthomonas begoniae**, begonia diseases, annual report, Netherlands 6126, 6961
- X. campestris**
 bean (*Phaseolus*) diseases 5247
 cauliflower and broccoli diseases 3664
 host-pathogen relationships, cabbage diseases 1985
 hybrid resistance, cabbage diseases 5188
 resistance, cabbage diseases 2760
 tomato diseases 5247
 varietal resistance
 brussels sprouts diseases 4420
 cabbage diseases 4420
Zantedeschia *spp.*, diseases 2961
- Xanthomonas citri**
 citrus diseases 797, 4475
 pathogen survival, citrus diseases 5561
 pest relationships, citrus diseases 5562
 varietal resistance, citrus diseases 8059
- X. dieffenbachiae**, philodendron diseases 7027
- Xanthomonas hyacinthi**
 bulb treatment, heat, hyacinth diseases 2242, 4656
 hyacinth diseases, annual report, Netherlands 2219
- X. malvacearum**, resistance, cabbage diseases 2760
- X. pelargonii**, infection process, geranium diseases 5408
- X. phaseoli**
 aerial survey, bean (*Phaseolus*) diseases 179
 bean (*Phaseolus*) diseases 180, 1213, 4474, 5247
 resistance
 bean (*Phaseolus*) diseases 5248
- Xanthomonas phaseoli** *contd.*
 resistance *contd.*
 bean (*Vicia*) diseases 5248
 seed germination, bean (*Phaseolus*) diseases 8677
 tomato diseases 5247
 varietal resistance, bean (*Phaseolus*) diseases 5234, 7696
- X. pruni**
 control, peach diseases 7448
Prunus *spp.*, diseases 915
 stone fruits, diseases 6609
 varietal resistance
 peach diseases 1816
 plum diseases 3507, 5060, 7470
- X. spp.**, symptoms, geranium diseases 8869
- X. vasculorum**
 resistance, cabbage diseases 2760
 sugar cane diseases 4889
- X. vesicatoria**
 bean (*Phaseolus*) diseases 5247
 capsicum diseases, annual report, USA 4367
 host-parasite relationships, nitrogen metabolism, capsicum diseases 2848
 host reactions, vegetables, diseases 7794
 resistance, tomato diseases 2110
 tomato diseases 180, 5247
 annual report, USA 4368
 varietal resistance, capsicum diseases 4532-4533
- X. vitians**
 lettuce diseases 8608
 varietal resistance, lettuce diseases 8608
- X. vitis-viniferae**, India, grapevine diseases 7572
- Xanthosoma brasiliense**
 diseases, mosaic 7823
 growing 7823
- X. spp.**
 diseases, dasheen mosaic 2975
 growing
 as an intercrop, pineapple 9198
 vegetable crop 6119
 leaf
 composition
 protein 6119
 vitamins 6119
- Xiphinema americanum**
 lawns and sports turf pests 2265
 raspberry pests 5810
 vectors, tomato ringspot, narcissus pests 2254
 virus vectors, stem pitting virus, peach pests 1822
- X. bakeri**, raspberry pests 532
- X. brevicolle**
 coffee pests 1581
 soil treatment, litchi pests 6373
- X. diversicaudatum**
 hop pests
 annual report, UK 3040
 vectors, nettlehead, annual report, UK 9009
 vectors
 arabis mosaic
 carnation pests, annual report, Netherlands 6961
Cyphomandra betaceae, pests 1528
 hop pests 3041
 latent strawberry ringspot, rose pests 7947
- X. index**
 soil fumigation, grapevine pests 7573
 vectors, fanleaf, grapevine pests 5133
- X. spp.**
 population studies, decline association, citrus pests 8078
 sugar cane pests 7246
- Xyleborus formicatus**
 clonal susceptibility, tea pests 4899
 tea pests 8275
 annual report
 India 1657
 Sri Lanka 8262
- X. morstatti**, hybrid resistance, coffee pests 1569
- X. spp.**, cacao pests 2444
- Xylosandrus compactus**, avocado pests, annual report, USA 8051
- Xylosandrus** *contd.*
X. morigerus
 alternative hosts
 avocado
 coffee pests 8154
Salix humboldtiana, pests 8154
 coffee
 avocado pests 8154
Salix humboldtiana, pests 8154
Salix humboldtiana
 avocado pests 8154
 coffee pests 8154
- Xylotrupes** *spp.*, coconut pests 2444
- Yearbook**
 horticultural, Denmark 3298
 International Dendrology Society 3906
 lily, USA 5427-5428
 production, FAO 1672
 South African sugar 7229
 tomato, USA 2853
 Trade, FAO 863
- Yeasts**, fig diseases 8450
- Yerba maté**
 alkaloids, determination 5596
 cover crops, *Medicago polymorpha* 8118
- Yerba maté soil**, cultivation, methods compared 6381
- Yield**
 estimation
 methods compared, pome fruits 979
 sampling, sugar cane, annual report, South Africa 7230
 tree age, macadamia 4822
 forecasting
Sorbus aucuparia 1045
Vaccinium *spp.* 1870-1871
 potential, assessment 8296
- Yields**, crop, symposium 4
- Yucca** *spp.*, calcium, translocation, annual report, Netherlands 6962
- Yugoslavia**, fruit, production and trade 2520
- Zantedeschia aethiopica**
 chloroplast, development 8911
 growth substances
 endogenous
 fruit 8911
 spathe 8911
- Z. spp.**
 annual report, Austria 265
- bulb**
 size
 flower
 height 4660
 number 4660
- storage**
 temperature
 flower
 height 4660
 number 4660
- diseases**
 annual report, USA 2152
 dasheen mosaic 2975
Xanthomonas campestris 2961
 dwarfing, growth substances, ancymidol 4660
- flower**
 size
 nitrogen nutrition 2950
 soil moisture 2950
- growing**, in pots, annual report, Netherlands 6127
- growth substances**
 dwarfing, ancymidol 2950, 4660
 flowering date, ancymidol 2950
 nutrition, nitrogen 2950
- soil**
 moisture
 flower, size 2950
 plant height 2950
- varieties**
 evaluation 7009
 Florida 7009
- Zanthoxylum alatum**, essential oil, medicinal properties 3016
- Z. elephantiasis**
 canthin-6-one, content 2372
 medicinal properties 2372
- Zeadiatraea** *spp.*, Mexico, sugar cane pests 6440
- Zebrina pendula**, leaf, age, cell injury . resistance 5457

Zephodia convolutella

- biological control
- black currant pests 7498
- gooseberry pests 7498

***Zephyranthes* spp.**

- breeding and selection 3881
- genetics 3881

Zetzellia mali*, predator on, *Panonychus

- ulmi*, apple 1756, 4213

Zeuzera pyrina*, olive pests 4028*Zinc**

- absorption
 - bean (*Phaseolus*), annual report, USA 3616
 - foliar, coffee 394
- leaf
 - coffee 3200
 - sources, coffee 7192
 - spray pH, coffee 7192
- orange 6342-6343
- soil salinity
 - squash 6912
 - tomato 6912
- application
 - dormant buds, apple 948
- foliar
 - almond 8333
 - apple 5011
 - disease incidence, grapevine 7568
 - fruit trees and plants 913
 - grapevine 7568
 - orange 1482, 4791, 6342-6343
 - ornamental flowers 1343
 - precipitants, orange 9086
 - residues, orange 9086
- methods compared
 - orange 7138
 - pecan nutrition 1036
- availability
 - nitrogen nutrition
 - chrysanthemum 8589
 - vegetables 8589
 - orange 8073
- calcium nutrition, orange 8073
- content
 - copper nutrition, coffee 393
- leaf
 - nitrogen nutrition, sources, peach 3470
 - phosphorus nutrition, apple 1742
 - rootstocks, plum 2657
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
- seasonal variations, hop 344
- shoot
 - root temperature, chrysanthemum 8863
 - seasonal variations, apple 6554
 - varietal differences, apple 6554
- deficiency
 - apple 8385
 - apple nutrition 948
 - chloroplast, proteins, content, tomato 4564
 - chlorosis, orange 3121
 - coffee 9166
 - cucumber and gherkin 7683
 - diagnosis, enzyme activity, vegetables 1145
 - pecan nutrition 1036-1037
 - symptoms
 - cauliflower and broccoli nutrition 1983
 - coffee 3197
 - grapevine, annual report, German Federal Republic 4298
- determination, atomic absorption spectrophotometry 8290
- flower, formation, ornamental flowers 1343
- fruit
 - composition
 - apple 5011
 - orange nutrition 1478
 - quality, juice content, orange 6342-6343
- iron imbalance, mangosteen nutrition 1667
- leaf
 - composition, apple 4977
 - potassium content, orange 9087
- leaf analysis
 - citrus 1484

Zinc contd.

- leaf analysis contd.
 - cucumber and gherkin 7683
 - orange nutrition 1478
 - sugar cane 412
- metabolism, rosetting, fruit trees and plants 913
- nitrogen, content, orange nutrition 1481
- plant, anatomy, grapevine nutrition 5105
- plant analysis
 - bean (*Phaseolus*) nutrition 2019
 - sugar cane 6437
- respiration
 - leaf, tomato 6080, 6922
 - root, tomato 6922
- seed, production, ornamental flowers 1343
- sources
 - chrysanthemum 8589
 - compared, orange 8073
 - fruit, quality, orange 3121
 - nutrient absorption, orange 3121
 - pecan nutrition 1036
 - vegetables 8589
- toxicity
 - cucumber and gherkin 157, 7683
 - grapevine 7567
 - nitrogen nutrition
 - chrysanthemum 8589
 - vegetables 8589
 - symptoms, bean (*Phaseolus*) 7704
 - vegetables
 - nutrition 1952
 - tissue culture 121
 - translocation, bean (*Phaseolus*), annual report, USA 3616
 - water relations, melon (cantaloup and musk) 2773

Zinnia

- annual report, Canada 2910
- seedling, raising, containers 2218

Zinnia diseases

- mosaic
 - host amino acids, content 8881
 - host nutrients, content 8881
- pea mild mosaic 4502

Zinnia nutrition

- nitrogen 6133
- flower, number 7892
- phosphorus 6133

Zinnia seed, germination 725***Ziziphora afghanica*, essential oil,**

- composition 3949

Ziziphus jujuba

- frost, resistance 5667
- fruit, composition 5667
- growth substances, cuttings, treatment, IBA 3293
- propagation, cuttings, treatment, growth substances, IBA 3293

Z. mauritiana

- fruit, morphology 9280
- propagation
 - budding
 - shield 9281
 - time 9281
- rootstocks, propagation, seed 3292
- seed, treatment, methods compared 3292
- varieties
 - fruit, ripening time 9280
 - identification 3291
 - indentification, fruit 9280

Z. spp.

- carbohydrates, content 2336
- fruit, phenolic compounds, content 858
- glycosides, content 2336
- growing, India 5665
- pests, *Meridarchis scyroides* 857
- varieties, India 5665
- water, flow 2369

***Zoysia* spp.**

- lawns and sports turf, weed control 8913
- pests

- nematodes, resistance 4672
- Sphenophorus venatis vestita* 4672

***Zygocactus* spp.**

- flower
 - bud initiation
 - photoperiodism 6200
 - temperature 6200
 - flowering, photoperiodism 7028
 - photoperiodism
 - flower bud, initiation 6200

***Zygocactus* spp. contd.**

- photoperiodism contd.
 - flowering 7028
 - temperature, flower bud, initiation 6200

19888

Scientific and Technical Serial
Publications regularly seen in the Preparation
of *Horticultural Abstracts*

ADAS Quarterly Review
 ASHRAE Journal
 AUARA (Annamalai University Agricultural Research Annual)
 Abstracts of Bulgarian Scientific Literature, Biology and Biochemistry
 Abstracts of Romanian Scientific and Technical Literature
 Acta Agriculturae Scandinavica
 Acta Agrobotanica
 Acta Agronomica
 Acta Agronomica Academiae Scientiarum Hungaricae
 Acta Biologica Academiae Scientiarum Hungaricae
 Acta Botanica Neerlandica
 Acta Entomologica Bohemoslovaca
 Acta Entomologica Fennica
 Acta Fytotechnica
 Acta Horticulturae
 Acta Operativo-Oeconomica
 Acta Phytomedica (*supplements to* Phytopathologische Zeitschrift)
 Acta Phytopathologica Academiae Scientiarum Hungaricae
 Acta Prähistorica
 Acta Technologica Agriculturae
 Acta Universitatis Agriculturae, Brno, A
 Acta Universitatis Agriculturae, Brno, C
 Acta Universitatis Agriculturae, Brno, D
 Acta Zootechnica
 Activity Report, Government Agricultural Research Centre, Ghent
 Administration Report of the Director of Agriculture, Ceylon
 Advances in Agronomy
 Advances in Food Research
 Advances in Genetics
 Advances in Virus Research
 Agrartudományi Egyetem Közleményei
 Agrekon
 Agri Digest
 Agri Hortique Genetica
 Agricoltura delle Venezie
 Agricultura, Belgium
 Agricultura, Portugal
 Agricultura Técnica
 Agricultura Técnica en México
 Agricultura Tropical
 Agricultural Bulletin of Saga University
 Agricultural Engineering
 Agricultural Gazette of New South Wales
 Agricultural Literature of Czechoslovakia
 Agricultural Marketing
 Agricultural Meteorology
 Agricultural Research Journal of Kerala
 Agricultural Research Review
 Agricultural Research, South Africa
 Agricultural Research, USA
 Agricultural Science Digest
 Agricultural Science Hong Kong
 Agriculture, Canada
 Agriculture in Northern Ireland
 Agriculture, Pakistan
 Agriculture, UK
 Agro Sur
 Agrobotanika
 Agrochemophysica
 Agronomia Angolana
 Agronomia Lusitana
 Agronomia Moçambicana
 Agronomia Tropical
 Agronômico
 Agronomie Tropicale
 Agronomy Journal
 Agroplantae
 Agrotecnia de Cuba
 American Fruit Grower
 American Horticulturist
 American Journal of Botany
 American Journal of Enology and Viticulture
 American Nurseryman
 American Orchid Society Bulletin
 American Orchid Society Yearbook *see under* Yearbook
 American Statistician

American Tomato Yearbook
 American Vegetable Grower
 Anais da Escola Superior de Agricultura "Luiz de Queiroz"
 Anais do Instituto Superior de Agronomia
 Analele Institutului de Cercetări pentru Cereale și Plante Tehnice, C
 Analele Institutului de Cercetări pentru Protecția Plantelor
 Anales Científicos, Peru
 Anales de Edafología y Agrobiología
 Anales de la Estación Experimental de Aula Dei
 Anales del Instituto de Biología Universidad Nacional Autónoma de México, Botánica
 Anales del Instituto Nacional de Investigaciones Agrarias, Producción Vegetal
 Anales del Instituto Nacional de Investigaciones Agrarias, Protección Vegetal
 Anales Instituto Nacional de Investigaciones Agronómicas
 Analyst
 Analytica Chimica Acta
 Analytical Abstracts
 Analytical Biochemistry
 Analytical Chemistry
 Angewandte Botanik
 Annales Academiae Scientiarum Fennicae, A(II)
 Annales Academiae Scientiarum Fennicae, A(IV)
 Annales Agriculturae Fenniae
 Annales Agronomiques
 Annales de l'Amélioration des Plantes
 Annales Bogorienses
 Annales Botanici Fennici
 Annales Entomologici Fennici
 Annales de Gembloux
 Annales de l'Institut National Agronomique
 Annales de l'Institut National de la Recherche Agronomique de Tunisie
 Annales de l'Institut Phytopathologique Benaki
 Annales de Physiologie Végétale, France
 Annales de Phytopathologie
 Annales de Technologie Agricole
 Annales Universitatis Mariae Curie-Skłodowska, C
 Annales Universitatis Mariae Curie-Skłodowska, E
 Annales Zoologici Fennici
 Annales de Zoologie — Ecologie Animale
 Annali Accademia Nazionale di Agricoltura
 Annali della Facoltà di Agraria, Perugia
 Annali della Facoltà di Agraria, Pisa
 Annali della Facoltà di Agraria, Università Cattolica del Sacro Cuore, Milano
 Annali della Facoltà di Agraria, Università degli Studi, Milano
 Annali della Facoltà di Scienze Agrarie della Università degli Studi di Napoli Portici
 Annali della Facoltà di Scienze Agrarie della Università degli Studi di Torino
 Annali dell'Istituto Sperimentale Agronomico
 Annali dell'Istituto Sperimentale per l'Agrumicoltura
 Annali dell'Istituto Sperimentale per le Colture Industriali
 Annali dell'Istituto Sperimentale per la Frutticoltura
 Annali dell'Istituto Sperimentale per la Valorizzazione Tecnologica dei Prodotti Agricoli
 Annals of Agricultural Science
 Annals of Applied Biology
 Annals of Botany
 Annals of the Entomological Society of America
 Annals of the Missouri Botanical Garden
 Annals of the New York Academy of Sciences
 Annals of the Phytopathological Society of Japan
 Annual Journal, Royal New Zealand Institute of Horticulture
 Annual Departmental Report by the Director of Agriculture and Fisheries, Hong Kong
 Annual Report, Agricultural Experiment Station of the University of Kentucky
 Annual Report of the Agricultural Experiment Station, University of Wisconsin
 Annual Report of the Agricultural Research Council
 Annual Report of the Agricultural Research Institute of Ontario
 Annual Report, Agricultural Research Station, Kade (University of Ghana)
 Annual Report, Akita Prefecture Fruit-Tree Experiment Station
 Annual Report, An Foras Talúntais (The Agricultural Institute)
 Annual Report of the Aomori Apple Experiment Station
 Annual Report of the Bureau of Sugar Experiment Stations, Queensland
 Annual Report, CSIRO Division of Horticultural Research
 Annual Report, CSIRO Division of Irrigation Research
 Annual Report, CSIRO Division of Land Research
 Annual Report, CSIRO Division of Plant Industry
 Annual Report on Cacao Research, University of the West Indies
 Annual Report of the Central and Regional Aracanut Research Stations
 Annual Report of the Citrus Research Unit of the University of the West Indies
 Annual Report, Cocoa Research Institute, Ghana
 Annual Report of the Cocoa Research Institute of Nigeria
 Annual Report, Coffee Research Foundation, Kenya
 Annual Report, Commonwealth Scientific and Industrial Research Organization
 Annual Report, Cyprus Agricultural Research Institute
 Annual Report, Department of Agriculture, British Columbia
 Annual Report, Department of Agriculture, Forests and Fisheries, Western Samoa
 Annual Report of the Department of Agriculture, Sabah
 Annual Report of the Department of Agriculture, Seychelles
 Annual Report, Department of Agriculture, Stock and Fisheries, Papua New Guinea

Annual Report, Department of Hop Research, Wye College
 Annual Report of the Division of Agriculture, Malaya
 Annual Report, East African Agriculture and Forestry Research Organization
 Annual Report, East African Industrial Research Organization
 Annual Report, Efford Experimental Horticulture Station
 Annual Report, Entomology Branch, New South Wales Department of Agriculture
 Annual Report, Experiment Station, Hawaiian Sugar Planters' Association
 Annual Report, Experiment Station of the South African Sugar Association
 Annual Report, Food Research Institute (Agricultural Research Council)
 Annual Report, Glasshouse Crops Research Institute
 Annual Report, Indian Council of Agricultural Research
 Annual Report of the Institute for Agricultural Research and Special Services, Samaru
 Annual Report, John Innes Institute
 Annual Report, Joint Coconut Research Scheme, British Solomon Islands Protectorate
 Annual Report, Letcombe Laboratory (Agricultural Research Council)
 Annual Report, Levin Horticultural Research Centre
 Annual Report, Luddington Experimental Horticulture Station
 Annual Report, Macaulay Institute for Soil Research
 Annual Report, Mauritius Sugar Industry Research Institute
 Annual Report of the Minister for Agriculture and Fisheries, Irish Republic
 Annual Report of the Minister of Agriculture and Food, Ontario
 Annual Report, Ministry of Agriculture, Co-ops and Marketing, Lesotho
 Annual Report of the Ministry of Agriculture and Natural Resources, Mauritius
 Annual Report of the Ministry of Agriculture, Swaziland
 Annual Report, Mississippi Agricultural and Forestry Experiment Station
 Annual Report, National Vegetable Research Station, Wellesbourne
 Annual Report, New Mexico State University Agricultural Experiment Station
 Annual Report, New York State Agricultural Experiment Station, Geneva
 Annual Report, Newcastle-upon-Tyne School of Agriculture
 Annual Report of the Nigerian Institute for Oil Palm Research
 Annual Report, North of Scotland College of Agriculture
 Annual Report of the Northern Nut Growers' Association
 Annual Report, Nova Scotia Fruit Growers' Association
 Annual Report, Pea Growing Research Organisation Ltd.
 Annual Report, Plant Breeding Institute, Cambridge
 Annual Report, Queensland Department of Primary Industries
 Annual Report of the Research Branch, Department of Agriculture, Sarawak
 Annual Report of the Research Branch, Department of Agriculture, Zambia
 Annual Report of the Research Department, Sugar Manufacturers' Association (of Jamaica) Ltd.
 Annual Report of the Research Division, Department of Agriculture, Swaziland
 Annual Report of the Research Division, Ministry of Agriculture, Kenya
 Annual Report of Research and Graduate Education of the Department of Horticulture, Michigan State University
 Annual Report, Research Station for Fruit Growing, Wilhelminadorp
 Annual Report, Research Station, Kentville, Nova Scotia
 Annual Report on Research and Technical Work of the Ministry of Agriculture for Northern Ireland
 Annual Report, Rubber Research Institute of Malaya
 Annual Report, Scottish Horticultural Research Institute
 Annual Report of the Society of Plant Protection of North Japan
 Annual Report, Sprenger Instituut, Wageningen
 Annual Report of the Sugarcane Breeding Institute, Coimbatore
 Annual Report, Swedish Institute for Food Preservation Research
 Annual Report, Taiwan Sugar Experiment Station
 Annual Report, Tanganyika Sisal Marketing Board
 Annual Report, Tate & Lyle Ltd. Research Centre
 Annual Report, Tea Research Institute of East Africa
 Annual Report, Tropical Pesticides Research Institute, East African Community
 Annual Report, Tropical Pesticides Research Unit, Porton Down
 Annual Report of the West Indies Central Sugar Cane Breeding Station and the Barbados Sugar Cane Variety Testing Station
 Annual Report, West of Scotland Agricultural College
 Annual Reports on the Progress of Chemistry, A
 Annual Reports on the Progress of Chemistry, B
 Annual Research Report, Horticultural Research Station, Tatura
 Annual Research Report of the Institute of Food and Agricultural Sciences, University of Florida
 Annual Review of Biochemistry
 Annual Review of Entomology
 Annual Review of Microbiology
 Annual Review of Phytopathology
 Annual Review of Plant Physiology
 Annual Review, Rubber Research Institute of Ceylon
 Annual Review, Terrington Experimental Husbandry Farm
 Annual Scientific Report, Indian Agricultural Research Institute
 Annual Scientific Report, Tea Research Association, Calcutta
 Anzeiger für Schädlingskunde Pflanzen- und Umweltschutz
 Apicultural Abstracts
 Araneta Research Journal
 Årbog for Gartneri
 Arboretum Kórnickie
 Arboriculture Fruitière
 Arborist's News
 Archiv für Gartenbau
 Archiv für Genetik
 Archiv der Julius Klaus-Stiftung für Vererbungsforschung, Sozialanthropologie und Rassenhygiene (*continued as*
 Archiv für Genetik)
 Archiv für Züchtungsforschung
 Archives of Biochemistry and Biophysics

Arkansas Farm Research
 Arnoldia
 Arquivos do Instituto Biológico
 Årsmelding, Norges Landbruksvitenskapelige Forskningsråd
 Årsredogörelse, Svenska Institutet för Konserveringsforskning
 Årsskrift, Kongelige Veterinaer- og Landbohøjskole
 Årsskrift for Planteskoledrift og Dendrologi
 Atti Accademia Italiana della Vite e del Vino
 Atti Istituto Botanico della Università Laboratorio Crittogamico Pavia
 Australian Citrus News
 Australian Horticultural Research Newsletter
 Australian Journal of Agricultural Research
 Australian Journal of Biological Sciences
 Australian Journal of Botany
 Australian Journal of Chemistry
 Australian Journal of Experimental Agriculture and Animal Husbandry
 Australian Journal of Soil Research
 Australian Science Index
 Australian Vegetable Research Newsletter
 Awamia

 B.C.F.G.A. Quarterly Report
 BFMiRA Abstracts (*continued as Food RA Abstracts*)
 B.V.O. Mededelingen
 Bacteriological Reviews
 Bailey
 Banana Bulletin
 Bedrijfsontwikkeling
 Bee World
 Begonian
 Beiträge zur Entomologie
 Beiträge zur Tropischen und Subtropischen Landwirtschaft und Tropenveterinärmedizin
 Belmontia, III
 Berättelse för Verksamheten, Avdelningen för Växtförädling av Frukt och Bär Lantbrukshögskolan, Balsgård
 Beretning fra Faellesudvalget for Prøvedyrkning af Køkkenurter
 Berichte des Deutschen Wetterdienstes
 Berichte des Ohara Instituts für Landwirtschaftliche Biologie Okayama Universität
 Besseres Obst
 Better Crops with Plant Food
 Better Fruit . . . Better Vegetables
 Bhartiya Krishi Anusandhan Patrika
 Bibliografia de Café
 Bibliographie Agricole Courante Roumaine
 Bibliographie der Pflanzenschutz-Literatur
 Bibliographien des Deutschen Wetterdienstes
 Biennial Report, California Department of Agriculture
 Biennial Report of the Director, Kansas State University Agricultural Experiment Station
 Biennial Report, Georgia Agricultural Experiment Stations
 Biennial Report, Hawaii Agricultural Experiment Station
 Biennial Report of the Waite Agricultural Research Institute
 Biochemical Journal
 Biochemical Society Transactions
 Biochimica et Biophysica Acta
 Biokhimiya
 Biológia, Czechoslovakia
 Biologia Plantarum
 Biological Reviews
 Biológico
 Biologisches Zentralblatt
 Biometrics
 Biometrika
 BioScience
 Biuletyn Warzywniczy
 Bloembollencultuur
 Bloembollengids
 Bodenkultur
 Boletín para Bibliotecas Agrícolas
 Boletín Informativo Instituto Salvadoreño de Investigaciones del Café
 Boletín del Instituto Nacional de Investigaciones Agronómicas
 Boletín de Patología Vegetal y Entomología Agrícola
 Bollettino del Laboratorio di Entomologia Agraria "Filippo Silvestri"
 Bollettino di Zoologia Agraria e di Bachicoltura
 Boron in Agriculture
 Botanical Gazette
 Botanical Journal of the Linnean Society
 Botanical Review
 Botanicheskii Zhurnal
 Botyu-Kagaku
 Bragantia
 British Farmer
 Brittonia
 Bulletin de l'Académie des Sciences Agricoles et Forestières
 Bulletin of the Agricultural Chemicals Inspection Station
 Bulletin of the Agricultural Research Institute of Kanagawa Prefecture

Bulletin of the Akita Fruit-Tree Experiment Station
 Bulletin of the Aomori Apple Experiment Station
 Bulletin Balai Penelitian Perkebunan Medan
 Bulletin of the Chugoku Agricultural Experiment Station
 Bulletin of the College of Agriculture, Utsunomiya University
 Bulletin of the College of Agriculture and Veterinary Medicine, Nihon University
 Bulletin Colorado Flower Growers' Association
 Bulletin, Ecole Nationale Supérieure d'Agronomie et des Industries Alimentaires, Nancy
 Bulletin of the Ecological Society of America
 Bulletin of Entomological Research
 Bulletin of the Entomological Society of Canada
 Bulletin of Experimental Biology
 Bulletin de la Faculté d'Agronomie
 Bulletin of the Faculty of Agriculture, Cairo University
 Bulletin of the Faculty of Agriculture, Hirosaki University
 Bulletin of the Faculty of Agriculture, Kagoshima University
 Bulletin of the Faculty of Agriculture, Meiji University
 Bulletin of the Faculty of Agriculture, Mie University
 Bulletin of the Faculty of Agriculture, Miyazaki University
 Bulletin of the Faculty of Agriculture, Tamagawa University
 Bulletin de la Fédération Nationale des Syndicats Agricoles des Cultivateurs de Champignons
 Bulletin of the Fukui Agricultural Experiment Station
 Bulletin of the Hiroshima Prefectural Experiment Station
 Bulletin of the Hokkaido Prefectural Agricultural Experiment Station
 Bulletin of the Hokuriku Agricultural Experiment Station
 Bulletin of the Horticultural Research Station, A (Hiratsuka)
 Bulletin of the Horticultural Research Station, B (Okitsu)
 Bulletin of the Horticultural Research Station, C (Morioka)
 Bulletin of the Horticultural Research Station, D (Kurume)
 Bulletin of Ibaraki Horticultural Experiment Station
 Bulletin de l'Institut International du Froid
 Bulletin of the Institute for Agricultural Research on Rolling Land
 Bulletin of the Institute of Agricultural Research, Tohoku University
 Bulletin of the Iwate-ken Agricultural Experiment Station
 Bulletin du Jardin Botanique National de Belgique
 Bulletin of the Kanagawa Horticultural Experiment Station
 Bulletin of the Kyoto Agricultural Experiment Station
 Bulletin of the Nara Agricultural Experiment Station
 Bulletin of the National Institute of Agricultural Sciences, A
 Bulletin of the National Institute of Agricultural Sciences, C
 Bulletin of the National Research Institute of Tea
 Bulletin de l'O.I.V.
 Bulletin Pennsylvania Flower Growers
 Bulletin des Recherches Agronomiques de Gembloux
 Bulletin of the Shikoku Agricultural Experiment Station
 Bulletin of the Shimane Agricultural College
 Bulletin of the Shimane Agricultural Experiment Station
 Bulletin of the Shizuoka Agricultural Experiment Station
 Bulletin of the Shizuoka Prefectural Citrus Experiment Station
 Bulletin de la Société Française de Physiologie Végétale
 Bulletin of the Tohoku National Agricultural Experiment Station
 Bulletin of the Torrey Botanical Club
 Bulletin of the University of Osaka Prefecture, B
 Bulletin Výzkumný Ústav Zelinářský Olomouc
 Bulletin of the Yamanashi Prefectural Agricultural Experiment Station
 Byulleten' Glavnogo Botanicheskogo Sada
 Byulleten' Gosudarstvennogo Nikitskogo Botanicheskogo Sada
 Byulleten' Vsesoyuznogo Ordena Lenina Instituta Rastenievodstva imeni N.I. Vavilova

 CSIRO Abstracts
 CSIRO Food Research Quarterly
 CSIR Research Review
 Cacau Atualidades
 Cactus and Succulent Journal
 Café Cacao Thé
 Cahiers d'Agriculture Pratique des Pays Chauds (*Supplement to Agronomie Tropicale*)
 Cahiers O.R.S.T.O.M., Biologie
 Cahiers de la Recherche Agronomique
 California Agriculture
 California Rare Fruit Growers Yearbook
 Canada Agriculture
 Canadian Entomologist
 Canadian Journal of Biochemistry
 Canadian Journal of Botany
 Canadian Journal of Chemistry
 Canadian Journal of Genetics and Cytology
 Canadian Journal of Microbiology
 Canadian Journal of Physiology and Pharmacology
 Canadian Journal of Plant Science
 Canadian Journal of Soil Science
 Canadian Journal of Zoology
 Canadian Plant Disease Survey

- Cane Grower's Bulletin
 Cane Growers' Quarterly Bulletin
 Časopis Slezského Muzea, C
 Ceiba
 Cenicafé
 Ceres, FAO
 Ceylon Coconut Planters' Review
 Ceylon Coconut Quarterly
 Champignon
 Champignoncultuur
 Chemical Society Reviews
 Chemistry and Industry
 Chmelářství
 Chronica Horticulturae
 Citrograph
 Citrus and Sub-tropical Fruit Journal
 Cocoa Growers' Bulletin
 Coconut Bulletin
 Coconut Situation
 Coffee and Cacao Journal
 Collected Papers, Macaulay Institute for Soil Research
 Combined Proceedings International Plant Propagators' Society
 Commercial Grower
 Commonwealth Phytopathological News
 Communications in Soil Science and Plant Analysis
 Compte-Rendu des Travaux Poursuivis, Station de Recherches d'Arboriculture Fruitière d'Angers
 Comptes Rendus de l'Académie Agricole Georgi Dimitrov
 Comptes Rendus de l'Académie Bulgare des Sciences
 Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences, D
 Comptes Rendus des Séances de l'Académie d'Agriculture de France
 Comptes Rendus des Séances de la Société de Biologie
 Congrès Pomologique
 Contributi Istituto di Ricerche Agrarie
 Contributions from Boyce Thompson Institute
 Cranberries
 Crop Science
 Current Research
 Current Science

 Daffodil and Tulip Yearbook
 Darwiniana
 De Vinea et Vino Portugaliae Documenta, I
 De Vinea et Vino Portugaliae Documenta, II
 Deciduous Fruit Grower
 Défense des Végétaux
 Deutsche Baumschule
 Deutsche Gärtnerbörse
 Dissertation Abstracts International, B
 Documents Techniques
 Doklady Akademii Nauk Belorusskoj SSR, Biologicheskikh Nauk
 Doklady Akademii Nauk SSSR
 Doklady, Moskovskaya Sel'skokhozyaistvennaya Akademiya K.A. Timiryazeva
 Doklady Vsesoyuznoj Ordena Lenina Akademii Sel'skokhozyaistvennykh Nauk imeni V.I. Lenina
 Duna-Tisza Közi Mezőgazdasági Kísérleti Intézet Bulletinje (*continued as* Zöldségtermesztési Kutató Intézet Bulletinje)

 EPPO Bulletin
 East African Agricultural and Forestry Journal
 Ecology
 Economic Botany
 Eesti NSV Teaduste Akadeemia Toimetised, Bioloogia
 Endeavour
 Engineering
 Entomologia Experimentalis et Applicata
 Entomologist's Monthly Magazine
 Entomophaga
 Epistémoukē Epēteris
 Erwerbsgärtner
 Erwerbsobstbau
 Esperienze e Ricerche, Stazione Sperimentale Agraria Forestale di S. Michele all'Adige
 Essex Farmers Journal
 Estudos Agronómicos
 Euphytica
 Experientiae
 Experimental Agriculture
 Experimental Horticulture
 Experimental Record
 Experimental Work, Edinburgh School of Agriculture

 FAO Plant Protection Bulletin
 Farm Economist
 Farm and Food Research

Farmer, Jamaica
 Farmer and Stockbreeder
 Farmers' Newsletter
 Farmers Weekly
 Farming in South Africa
 Fertilité
 Fertiődi Nővénynevelési és Nővénytermesztési Kutató Intézet Közleményei
 Fette, Seifen, Anstrichmittel
 Field Station Record
 Fiji Agricultural Journal
 Fiziologicheskii Zhurnal SSSR
 Fiziologiya i Biokhimiya Kul'turnykh Rastenii
 Fiziologiya Rastenii
 Flavour Industry
 Florist and Nursery Exchange
 Food Irradiation, France
 Food RA Abstracts
 Food Technology, USA
 Foreign Agriculture
 Forest Science
 Forestry
 Forskning og Forsøk i Landbruket
 Frontiers of Plant Science
 Frugtavleren
 Fruit Belge
 Fruit Intelligence
 Fruit and Produce
 Fruit Varieties and Horticultural Digest (*continued as Fruit Varieties Journal*)
 Fruit Varieties Journal
 Fruit World & Market Grower
 Fruits
 Fruitteelt
 Fruitteeltblad
 Frutos
 Frutticoltura

 Garcia de Orta
 Garden Journal
 Gardeners' Chronicle
 Gardens' Bulletin
 Garten Magazin für Alle
 Gartenbau
 Gartenbauwissenschaft
 Gartenwelt
 Gartner Tidende
 Gartneryrket
 Gemüse
 Genetika
 Genetika i Selektsiya
 Georgia Agricultural Research
 Georgia Entomological Society Journal
 Georgofili
 Gesunde Pflanzen
 Ghana Farmer
 Ghana Journal of Agricultural Science
 Ghana Journal of Science
 Gids voor Groente- en Fruitteelt onder Glas
 Giornale Botanico Italiano
 Godišen Zbornik na Zemjodelsko-Šumarskiot Fakultet na Univerzitetot-Skopje, Zemjodelstvo
 Goodfruit Grower
 Gordian
 Gradinarska i Lozarska Nauka
 Gradinarstvo
 Greenhouse-Garden-Grass
 Groen
 Groentegids voor de Vollegrond
 Groenten en Fruit
 Grower
 Grundförbättring

 Handbook, Council for Scientific and Industrial Research, Ghana
 Haryana Agricultural University Journal of Research
 Hassadeh
 Haven
 Hawaii Farm Science
 Hawaiian Planters' Record
 Herba Hungarica
 Heredity
 Hilgardia
 Himachal Journal of Agricultural Research
 Hokuriku Byogaichu Kenkyukai (Proceedings of the Association for Plant Protection of Hokuriku)
 Holly Letter
 Hopfen-Rundschau
 Hort Report

- Horticultural Research
 Horticultural Science
 HortScience
 Hortus
 Hungarian Agricultural Review
 Hutoipar
 Hyogo Kenritsu Noka Daigaku (Memoirs of the Hyogo Prefectural University of Agriculture, Phytopathological Series)
 Idaho Agricultural Science
 Idia
 Illinois Research
 Illinois State Florists' Association Bulletin
 Indian Coffee
 Indian Farming
 Indian Horticulture
 Indian Journal of Agricultural Research
 Indian Journal of Agricultural Sciences
 Indian Journal of Agronomy
 Indian Journal of Chemistry
 Indian Journal of Experimental Biology
 Indian Journal of Horticulture
 Indian Journal of Pharmacy
 Indian Journal of Plant Physiology
 Indian Science Abstracts
 Indian Sugar
 Informationsdienst Weihenstephan
 Informatore Agrario
 Informatore Fitopatologico
 Informatore di Ortoflorofrutticoltura
 Instrument and Control Engineering
 Insulation, UK
 International Abstracts of Biological Sciences, Biochemistry
 International Pest Control
 International Sugar Journal
 Investigación y Progreso Agrícola
 Investigaciones Agropecuarias
 Irish Journal of Agricultural Research
 Israel Journal of Agricultural Research
 Israel Journal of Botany
 Israel Journal of Chemistry
 Israel Journal of Zoology
 Italia Agricola
 Izvestiya Akademii Nauk Azerbaïdzanskoi SSR, Biologicheskikh Nauk
 Izvestiya Akademii Nauk SSSR, Biologicheskaya
 Izvestiya na Botanicheskaya Institut
 Izvestiya Timiryazevskoi Sel'skokhozyaïstvennoi Akademii
 JNKVV Research Journal
 Jaarboek, Proefstation voor de Boomkwekerij te Boskoop
 Jaarverslag, Instituut voor Bodemvruchtbaarheid, Haren-Groningen
 Jaarverslag, Instituut voor Plantenziektenkundig Onderzoek, Wageningen
 Jaarverslag, Instituut voor Tuinbouwtechniek, Wageningen
 Jaarverslag, Laboratorium voor Bloembollenonderzoek, Lisse
 Jaarverslag, Landbouwproefstation Suriname
 Jaarverslag, Proefbedrijf der Noorderkempen, Meerte
 Jaarverslag, Proefstation voor de Bloemisterij in Nederland te Aalsmeer
 Jaarverslag van het Proefstation voor de Groenten en Fruitteelt onder Glas te Naaldwijk
 Jaarverslag, Stichting Centrum voor Plantenfysiologisch Onderzoek, Wageningen
 Jaarverslag, Tuinbouwstichting Hageland-Zuiderkempen Rillaar
 Jaarverslag, Westvlaamse Proeftuin
 Jahresbericht, Bundesanstalt für Qualitätsforschung Pflanzlicher Erzeugnisse in Geisenheim/Rheingau
 Jahresbericht, Institut für Angewandte Botanik der Universität Hamburg
 Jahresberichte, Biologische Bundesanstalt für Land- und Forstwirtschaft in Berlin und Braunschweig
 Jahresberichte des Deutschen Pflanzenschutzdienstes
 Jahresberichte, Fachhochschule Weihenstephan
 Jahresberichte, Hessische Forschungsanstalt für Wein-, Obst- und Gartenbau, Geisenheim (Rheingau)
 Jahresberichte, Landespflanzenschutzdienst, Rheinland-Pfalz
 Jahresberichte, Staatliche Lehr- und Versuchsanstalt für Wein- und Obstbau
 Jahresberichte der Versuchsanstalten und Beispielsbetriebe für Gartenbau der Landwirtschaftskammer Rheinland
 Japan Agricultural Research Quarterly
 Japan Pesticide Information
 Japanese Journal of Bacteriology
 Japanese Journal of Botany
 Japanese Journal of Tropical Agriculture
 Jardins de France
 Jardins et Logis
 Journal of the Agricultural Association of China
 Journal of Agricultural Engineering Research
 Journal of Agricultural and Food Chemistry
 Journal of Agricultural Research, Pakistan

Journal of Agricultural Science, Japan
 Journal of Agricultural Science, UK
 Journal of the Agricultural Society
 Journal of Agriculture, South Australia
 Journal d'Agriculture Tropicale et de Botanique Appliquée
 Journal of Agriculture of the University of Puerto Rico
 Journal of Agriculture, Victoria, Australia
 Journal of Agriculture, Western Australia
 Journal of the American Chemical Society
 Journal of the American Society for Horticultural Science
 Journal of the American Statistical Association
 Journal of Apicultural Research
 Journal of Applied Bacteriology
 Journal of Applied Ecology
 Journal of the Arnold Arboretum
 Journal of the Association of Official Analytical Chemists
 Journal of the Australian Institute of Agricultural Science
 Journal of Bacteriology
 Journal of Biological Chemistry
 Journal of the Biological Photographic Association
 Journal of the Central Agricultural Experiment Station
 Journal of the Chemical Society, C
 Journal of Chromatographic Science
 Journal of Chromatography
 Journal of Coffee Research
 Journal, Department of Agriculture and Fisheries, Irish Republic
 Journal of Economic Entomology
 Journal of Experimental Biology
 Journal of Experimental Botany
 Journal of the Faculty of Agriculture, Iwate University
 Journal of the Faculty of Agriculture, Kyushu University
 Journal of the Faculty of Agriculture, Shinshu University
 Journal of the Faculty of Science, University of Tokyo, III
 Journal of Food Science
 Journal of Food Technology
 Journal of General and Applied Microbiology
 Journal of General Microbiology
 Journal of Genetics
 Journal of Helminthology
 Journal of Heredity
 Journal of Horticultural Science
 Journal of the Institute of Brewing
 Journal of the Jamaican Association of Sugar Technologists
 Journal of the Japanese Society for Horticultural Science
 Journal of the Kanto-Tosan Agricultural Experiment Station
 Journal of the Korean Society for Horticultural Science
 Journal of the Kumasi University of Science and Technology
 Journal of the Madras University, B
 Journal of the Mississippi Academy of Sciences
 Journal of the National Agricultural Society of Ceylon
 Journal of the National Institute of Agricultural Botany
 Journal of Nematology
 Journal of Niigata Agricultural Experiment Station
 Journal of Pharmaceutical Sciences
 Journal of Physics E, Scientific Instruments
 Journal of Research, India
 Journal of the Rio Grande Valley Horticultural Society
 Journal of the Royal Agricultural Society of England
 Journal of the Royal Horticultural Society
 Journal of the Royal New Zealand Institute of Horticulture
 Journal of the Royal Statistical Society, B
 Journal of the Rubber Research Institute of Malaya
 Journal of the Science of Food and Agriculture
 Journal of the Scientific Agricultural Society of Finland
 Journal of Scientific and Industrial Research
 Journal of Soil Science
 Journal of South African Botany
 Journal of the Sports Turf Research Institute
 Journal of Tropical and Subtropical Agriculture and Tropical Veterinary Science
 Journal of the University of Newcastle upon Tyne Agricultural Society
 Journal of Virology
 Journal of the West African Science Association
 Journal of the Yamagata Agriculture and Forestry Society
 Jugoslovensko Voćarstvo
 Kagawa Daigaku Nôgakubu Gakuzuyutu Hôkoku
 Kakteen und Andere Sukkulanten
 Kansai Byochugai Kentyukai (Proceedings of the Kansai Plant Protection Society)
 Kent Farmer
 Kenya Coffee
 Kenya Sisal Board Bulletin
 Kertészeti és Szőlészeti

- Kertészeti Egyetem Közleményei
 Kertészeti Kutató Intézet Közleményei
 Kertgazdaság
 Kew Bulletin
 Key to Turkish Science, Agriculture
 Key to Turkish Science, Biological Sciences
 Key to Turkish Science, Chemistry
 Khimiya v Sel'skom Khozyaistve
 Kísérletügyi Közlemények, C
 Kita Nihon Byogaichu Kenkyukai (Annual Report of the Society of Plant Protection of North Japan)
 Knižní a Dokumentační Zpravodaj
 Korean Scientific Abstracts
 Kungl. Skogs- och Lantbruksakademiens Tidskrift

 LSHR Journal
 Laboratory Equipment Digest
 Laboratory Practice
 Lal-Baugh
 Land- en Tuinbouw Jaarboek
 Landwirtschaftliche Forschung
 Landwirtschaftliches Jahrbuch der Schweiz
 Lantbrukshögskolans Meddelanden, A
 Lasca Leaves
 Lebensmittel-Wissenschaft + Technologie
 Lily Yearbook of the North American Lily Society, Inc.
 Lily Yearbook, UK
 Lloydia
 Louisiana Agriculture
 Low Temperature Science, B
 Lozarstvo i Vinarstvo
 Lucrări Științifice, Institutul Agronomic "Ion Ionescu de la Brad", I
 Lucrări Științifice, Institutul Agronomic "N. Bălcescu", B
 Lucrări Științifice, Institutul Agronomic Timișoara, Agronomie
 Lucrări Științifice, Institutul de Cercetări și Proiectări pentru Păstrarea și Valorificarea Legumelor și Fructelor
 Lucrări Științifice, Institutul de Studii, Cercetări și Proiectări pentru Construcții Hortiviticole

 MAFES Research Highlights
 MARDI Research Bulletin
 Madras Agricultural Journal
 Magazine, College of Agriculture, Nagpur
 Malaysian Agricultural Journal
 Malaysian Agricultural Research
 Malaysian Pineapple
 Månedsoversigt over Plantervædsdomme
 Manx Journal of Agriculture
 Marcellia
 Maryland Florist
 Meddelande Statens Växtskyddsanstalt
 Mededelingen van de Faculteit Landbouwwetenschappen, Rijksuniversiteit Gent
 Mededelingen Landbouwhogeschool Wageningen
 Mededelingen, Naaldwijk, Netherlands
 Mekhanizatsiya i Elektrifikatsiya na Selskoto Stopanstvo
 Meldinger fra Norges Landbrukshøgskole
 Memoirs of the College of Agriculture, Ehime University
 Memoirs of the College of Agriculture, Kyoto University
 Memoirs of the College of Agriculture, National Taiwan University
 Memoirs of the Entomological Society of Canada
 Memoirs of the Faculty of Agriculture, Kagawa University
 Memoirs of the Faculty of Agriculture Kagoshima University
 Memoirs of the Tokyo University of Agriculture
 Memoria Anual, Estación Experimental Agrícola de Tucumán
 Memoria, Estación Experimental del Zaidín
 Menara Perkebunan
 Meteorological Magazine
 Michigan Florist
 Microscopy
 Mikologiya i Fitopatologiya
 Mikrobiologiya
 Minnesota Horticulturist
 Minutes of the Canada Weed Committee, Eastern Section
 Miscellaneous Publications of the National Institute of Agricultural Sciences, C
 Mississippi Farm Research (continued as MAFES Research Highlights)
 Mitteilungen aus der Biologischen Bundesanstalt für Land- und Forstwirtschaft Berlin-Dahlem
 Mitteilungen der Deutsche Landwirtschafts-Gesellschaft
 Mitteilungen des Obstbauversuchsringes des Alten Landes
 Mitteilungen Rebe und Wein, Obstbau und Früchteverwertung
 Mitteilungen für die Schweizerische Landwirtschaft
 Monthly Bulletin of Agricultural Economics and Statistics
 Morris Arboretum Bulletin

Mosonmagyaróvári Mezőgazdaságtudományi Kar Közleményei

Mushroom Journal

Mycologia

Mysore Journal of Agricultural Sciences

NIAE Newsletter

Nachrichtenblatt des Deutschen Pflanzenschutzdienstes

Nachrichtenblatt für den Pflanzenschutzdienst in der DDR

Naše Liečivé Rastliny

National Cactus and Succulent Journal

Nature, UK

Nature New Biology

Nature Physical Science

Naturwissenschaften

Nauchni Trudove, Vissh Selskostopanski Institut "Georgi Dimitrov", Rasteniev"dstvo

Nauchni Trudove, Vissh Selskostopanski Institut "Georgi Dimitrov", Obshcho Zemledelie

Nauchni Trudove, Vissh Selskostopanski Institut "Vasil Kolarov"

Nauchnye Doklady Vysshēi Shkoly, Biologicheskie Nauki

Nematologica

Netherlands Journal of Agricultural Science

Netherlands Journal of Plant Pathology

New Commonwealth

New Mexico Extension News

New Phytologist

New Scientist

New York State Flower Industries Bulletin

New York's Food and Life Sciences Bulletin

New Zealand Commercial Grower

New Zealand Gardener

New Zealand Journal of Agricultural Research

New Zealand Journal of Agriculture

New Zealand Journal of Botany

New Zealand Journal of Experimental Agriculture

New Zealand Journal of Science

News and Views

Newsletter, Indian Society for Nuclear Techniques in Agriculture and Biology

Newsletter, New York Botanical Garden

Nigeria Trade Journal

Nigerian Agricultural Journal

Nordisk Jordbrugsforskning

Norsk Hagetidend

North Carolina Flower Growers' Bulletin

Notes from the Royal Botanic Garden Edinburgh

Noticias Agrícolas

Notizario sulle Malattie delle Piante

Nouvelles Maraîchères et Vivrières de l'INRA aux Antilles

Növénytermelés

Nurseryman and Garden Centre

Obstbau Weinbau — —

Oecologia Plantarum

Ohio Florists' Association Bulletin

Ohio Journal of Science

Ohio Report on Research and Development

Oil Palm News

Oklahoma Farm Research Flashes

Oléagineux

Orchardist of New Zealand

Outlook on Agriculture

Ovoshcharstvo

PANS

Pacific Science

Pakistan Journal of Science

Pakistan Journal of Scientific Research

Papua New Guinea Agricultural Journal

Parasitica

Parasitologische Schriftenreihe

Parks and Recreation

Parks and Sports Grounds

Peat Abstracts

Peat and Plant News

Pedobiologia

Pépiniéristes Horticulteurs Maraîchers

Pesquisa Agropecuária Brasileira

Pesticide Biochemistry and Physiology

Pesticide Progress

Pesticide Science

Pesticides Review

Pflanzenarzt

Pflanzenschutz Nachrichten Bayer

Pflanzenschutzberichte
 Pharmazie
 Philippine Agriculturist
 Philippine Journal of Plant Industry
 Philippine Journal of Science
 Philosophical Transactions of the Royal Society, B
 Phosphorus in Agriculture
 Photogrammetric Record
 Photosynthetica
 Physical Sciences, New York, USA
 Physiologia Plantarum
 Physiological Plant Pathology
 Physiologie Végétale
 Phytiatric-Phytopharmacie
 Phytochemistry
 Phytoma
 Phytomorphology
 Phytom, Argentina
 Phytoparasitica
 Phytopathologia Mediterranea
 Phytopathologische Zeitschrift
 Phytopathology
 Phytophylactica
 Phytoprotection
 Plant and Cell Physiology
 Plant Disease Reporter
 Plant Pathology
 Plant Propagator
 Plant Protection
 Plant Science
 Plant Science Letters
 Plant and Soil
 Planta
 Planta Medica
 Planter, Malaya
 Planters' Bulletin of the Rubber Research Institute of Malaya
 Planters' Chronicle
 Planters Journal and Agriculturist
 Plantes Médicinales et Phytothérapie
 Plants and Gardens
 Pochvoznanie i Agrokhimiya
 Polish Journal of Soil Science
 Poljoprivredna Znanstvena Smotra
 Pol'nohospodárstvo
 Poona Agricultural College Magazine
 Portugaliae Acta Biologica, A
 Potash Review
 Power Farming
 Prace Instytutu Sadownictwa w Skierniewicach
 Preslia
 Principes
 Priroda, USSR
 Probleme Agricole
 Proceedings of the American Society of Sugar Cane Technologists
 Proceedings of the Annual Congress of the South African Sugar Technologists' Association
 Proceedings of the Annual Meeting, Arkansas State Horticultural Society
 Proceedings of the Annual Meeting, Connecticut Pomological Society
 Proceedings, Annual Meeting Massachusetts Fruit Growers' Association Inc.
 Proceedings of the Annual Meeting, New York State Horticultural Society
 Proceedings of the Annual Meeting, Washington State Horticultural Association
 Proceedings of the Association of Official Seed Analysts
 Proceedings of the Canadian Phytopathological Society
 Proceedings of the Entomological Society of Ontario
 Proceedings of the Florida State Horticultural Society
 Proceedings of the Helminthological Society of Washington
 Proceedings of the Indian Academy of Sciences, B
 Proceedings of the International Seed Testing Association (*continued as Seed Science and Technology*)
 Proceedings of the International Shade Tree Conference
 Proceedings of the Meeting of British West Indies Sugar Technologists
 Proceedings of the Meeting of the Holly Society of America
 Proceedings of the National Academy of Sciences of the United States of America
 Proceedings of the Oklahoma Academy of Science
 Proceedings of the Royal Institution of Great Britain
 Proceedings of the Royal Society of London, B
 Proceedings of the Scientific Conference, Tea Scientific Department, United Planters Association of Southern India
 Proceedings, Soil and Crop Science Society of Florida
 Proceedings of the Tropical Region, American Society for Horticultural Science
 Proceedings of the Utah Academy of Sciences, Arts and Letters
 Proceedings of the Zoological Society
 Progrès Agricole et Viticole
 Progress Report, Experimental Husbandry Farms and Experimental Horticulture Stations
 Progressive Horticulture
 Publications and Patents, Eastern Marketing and Nutrition Research Division
 Publications and Patents, Western Marketing and Nutrition Research Division

Punjab Fruit Journal
 Punjab Horticultural Journal
 Purdue Agriculture Reports
 Puutarha
 Pyrethrum Post

 Qualitas Plantarum
 Quarterly Journal of Crude Drug Research
 Quarterly Journal of the Royal Meteorological Society
 Quarterly Journal, Rubber Research Institute of Ceylon
 Quarterly Progress Report, Nigerian Institute for Oil Palm Research
 Quarterly Review of Agricultural Economics
 Quarterly Review of Biology
 Queensland Agricultural Journal
 Queensland Journal of Agricultural and Animal Sciences

 R.R.I.C. Bulletin
 Radovi Poljoprivrednog Fakulteta Univerziteta u Sarajevu
 Rapport d'Activité, Centre de Recherches Agronomiques de l'État, Gembloux
 Rapport d'Activité, Faculté des Sciences Agronomiques, Université Catholique de Louvain
 Rapport d'Activité, Laboratoire d'Arboriculture Fruitière, Institut National de la Recherche Agronomique de Tunisie
 Rapport d'Activité, Station d'Amélioration des Plantes Maraîchères d'Avignon-Montfavet
 Rapport d'Activité, Station des Cultures Fruitières et Maraîchères Gembloux
 Rapport Annuel, Institut pour l'Encouragement de la Recherche Scientifique dans l'Industrie et l'Agriculture
 Rapport Annuel, Institut Français de Recherches Fruitières Outre-Mer
 Rapport Annuel, Institut de Recherches sur le Caoutchouc en Afrique (I.R.C.A.)
 Rapport Annuel, Institut de Recherches pour les Huiles et Oléagineux
 Rapport des Essais, Station Provinciale de Recherches Scientifiques Agricoles et Viticoles
 Rapport Général, Comité National pour l'Étude de la Culture Fruitière (I.R.S.I.A.) Gembloux
 Rasen Turf Gazon
 Rasteniye'dni Nauki
 Rastitelna Zashchita
 Rastitel'nye Resursy
 Record of Agricultural Research
 Referativnyi Zhurnal, 55
 Refrigeration and Air Conditioning
 Report and Accounts, National Institute of Agricultural Botany
 Report of Activities, Rubber Board, India
 Report on Advisory Services and Howard Davis Farm, States of Jersey Department of Agriculture
 Report of the Annual Date Growers' Institute
 Report, Arthur Rickwood Experimental Husbandry Farm
 Report, Commonwealth Institute of Biological Control
 Report, Department of Agriculture, Fiji
 Report, Department of Agriculture and Fisheries for Scotland
 Report of the Department of Agriculture, New South Wales
 Report of the Department of Agriculture, New Zealand
 Report of the Department of Agriculture, St Vincent
 Report of the Director of Agriculture and Fisheries, Bermuda
 Report, East Malling Research Station
 Report, Fairfield Experimental Horticulture Station
 Report, Horticultural Research Institute of Ontario
 Report, Illinois Agricultural Experiment Station
 Report, Imperial Ethiopian Government Institute of Agricultural Research
 Report, Kirton Experimental Horticulture Station
 Report, Lee Valley Experimental Horticulture Station
 Report, Long Ashton Research Station
 Report, National Institute of Agricultural Engineering, Silsoe
 Report of the Pest Infestation Laboratory (Agricultural Research Council)
 Report of the Principal to the Governing Body, Wye College
 Report of the Research Department, Coconut Industry Board, Jamaica
 Report, Rosemaund Experimental Husbandry Farm
 Report, Rosewarne Experimental Horticulture Station and Ellbridge Sub-Station
 Report, Rothamsted Experimental Station
 Report, School of Agriculture, University of Nottingham
 Report of the Secretary for Agriculture, Rhodesia
 Report, Stockbridge House Experimental Horticulture Station
 Report of the Taiwan Sugar Experiment Station
 Report of the Tropical Products Institute
 Report, Weed Research Organization (Agricultural Research Council)
 Reports on the Progress of Applied Chemistry
 Research Bulletin of Bunda College of Agriculture
 Research Bulletin of the Plant Protection Service Japan
 Research and Farming
 Research Journal of Mahatma Phule Agricultural University
 Research in the Life Sciences
 Research Progress
 Research in Progress, School of Agricultural Sciences, University of Leeds
 Research and Publications, University of Birmingham
 Research Report, An Foras Talúntais (the Agricultural Institute), Horticulture and Forestry Division
 Research Report, An Foras Talúntais (the Agricultural Institute), Plant Sciences and Crop Husbandry Division
 Research Report, An Foras Talúntais (the Agricultural Institute), Rural Economy Division
 Research Report, Canada Department of Agriculture, Research Branch
 Research Report, Canada Weed Committee, Eastern Section

- Research Report, Canada Weed Committee, Western Section
 Research Report, Faculty of General Agriculture, University College Dublin
 Research Reports of the Kochi University, Agricultural Science
 Research Reports of the Office of Rural Development
 Research Studies
 Residue Reviews
 Revista Agrícola, Mozambique
 Revista de Agricultura, Cuba
 Revista de Agricultura, Piracicaba, Brazil
 Revista Agronómica del Noroeste Argentino
 Revista Cafetalera
 Revista Ceres
 Revista de Ciencias Agrícolas
 Revista de Ciencias Agronómicas, A
 Revista de Ciencias Agronómicas, B
 Revista de la Facultad de Agronomía La Plata, Argentina
 Revista de la Facultad de Agronomía Venezuela
 Revista de la Facultad de Agronomía y Veterinaria, Universidad de Buenos Aires
 Revista de la Facultad de Ciencias Agrarias, Universidad Nacional de Cuyo
 Revista Facultad Nacional de Agronomía Medellín
 Revista del Frio
 Revista de Horticultură și Viticultură
 Revista Industrial y Agrícola de Tucumán
 Revista del Instituto Agrícola Catalán de San Isidro
 Revista Instituto Colombiano Agropecuario
 Revista Theobroma
 Revue de l'Agriculture
 Revue Agricole et Sucrière de l'Île Maurice
 Revue de la Chambre d'Agriculture de la Réunion
 Revue Générale des Caoutchoucs et Plastiques
 Revue Horticole
 Revue Horticole Suisse
 Revue Roumaine de Biologie, Botanique
 Revue Roumaine de Biologie, Zoologie
 Revue Suisse d'Agriculture
 Revue Suisse de Viticulture Arboriculture Horticulture
 Rhodesia Agricultural Journal
 Rhodesian Journal of Agricultural Research
 Rhododendron and Camellia Yearbook
 Rhododendron und Immergrüne Laubgehölze Jahrbuch
 Rivista di Agricultura Subtropicale e Tropicale
 Rivista di Agronomia
 Rivista della Ortoflorofrutticoltura Italiana
 Rivista di Viticoltura e di Enologia
 Roczniki Nauk Rolniczych, A
 Roczniki Nauk Rolniczych, D
 Roczniki Wyższej Szkoły Rolniczej w Poznaniu
 Rose Annual
 Rostlinná Výroba
 Rubber Board Bulletin
 Rubber Developments
 Rural Research

 SYR Information med Fruktodlaren
 Sadovodstvo
 Sadovodstvo, Vinogradarstvo i Vinodelie Moldavii
 Samaru Agricultural Newsletter
 Sbornik Nauchnykh Rabot, Vsesoyuznyĭ Nauchno-Issledovatel'skiĭ Institut Sadovodstva imeni I.V. Michurina
 Sbornik Nauchnykh Trudov Belorusskoĭ Sel'skokhozyaĭstvennoĭ Akademii
 Sbornik Nauchnykh Trudov Ivanovskogo Sel'skokhozyaĭstvennogo Instituta
 Sbornik Trudov Aspirantov i Molodykh Nauchnykh Sotrudnikov
 Sbornik Vysoké Školy Chemicko-Technologické v Praze, Potraviný
 Schweizerische Gärtnerzeitung
 Schweizerische Zeitschrift für Obst- und Weinbau
 Science, USA
 Science in Agriculture
 Science Bulletin of the Faculty of Agriculture, Kyushu University
 Science and Culture
 Science Dimension
 Sciences Agronomiques Rennes
 Scientia Horticulturae
 Scientific Horticulture
 Scientific Report of the Faculty of Agriculture, Meijo University
 Scientific Reports of the Faculty of Agriculture, Okayama University
 Scottish Agriculture
 Search, USA
 Seed and Nursery Trader
 Seed Science and Technology
 Seiva
 Sel'skokhozyaĭstvennaya Biologiya
 Sementi Elette
 Series Tocklai Experimental Station

Serviço Informativo da Junta Nacional das Frutas
 Soil Biology and Biochemistry
 Soil Conservation
 Soil Science
 Soil Science and Plant Nutrition
 Soil Science Society of America Proceedings
 Solo
 Soobscheniya Akademii Nauk Gruzinskoi SSR
 South African Journal of Science
 South African Sugar Journal
 South African Sugar Year Book
 South Indian Horticulture
 Span
 Special Bulletin of the College of Agriculture, Utsonomiya University
 Special Bulletin, Okayama Prefectural Agricultural Experiment Station
 Stain Technology
 Stikstof
 Studi Sassaresi, III
 Studii și Cercetări de Biologie, Botanică
 Studii și Cercetări de Biologie, Zoologie
 Study of Tea
 Subtropicheskie Kul'tury
 Sugar y Azúcar
 Sugar Bulletin
 Sugar Journal
 Sugar News
 Sugarcane Pathologists Newsletter
 Summary Report for the Tree Nursery, Indian Head, Saskatchewan
 Surinaamse Landbouw
 Swedish Journal of Agricultural Research
 Szőlő- és Gyümölcsstermesztés

 Taiwan Agriculture Quarterly
 Taiwania
 Tasmanian Journal of Agriculture
 Taxon
 Tea in East Africa
 Tea Journal of Bangladesh
 Tea Quarterly
 Technical Bulletin, Faculty of Agriculture, Kagawa University
 Technical Bulletin of the Faculty of Horticulture, Chiba University
 Technical Report, Tea Research Institute of Ceylon
 Technology, India
 Tecnica Agricola
 Tetrahedron
 Theoretical and Applied Genetics
 Tidsskrift for Planteavl
 Tohoku Journal of Agricultural Research
 Torfnachrichten
 Transactions, Botanical Society of Edinburgh
 Transactions of the British Mycological Society
 Transactions of the Illinois State Horticultural Society
 Transactions of the Royal Society of Canada
 Transactions of the Tottori Society of Agricultural Science
 Tropical Abstracts
 Tropical Agriculture
 Tropical Agriculturist
 Tropical Science
 Trudy Gosudarstvennogo Nikitskogo Botanicheskogo Sada
 Trudy Instituta Eksperimental'noi Biologii, Kazakh SSR
 Trudy, Moldavskii Nauchno-issledovatel'skii Institut Sadovodstva, Vinogradarstva i Vinodeliya
 Trudy po Prikladnoi Botanike, Genetike i Selektzii
 Trudy Tadzhikskogo Sel'skokhozyaistvennogo Instituta
 Trudy Turkmenskogo Sel'skokhozyaistvennogo Instituta
 Trudy Vsesoyuznogo Nauchno-Issledovatel'skogo Instituta Zashchity Rastenii
 Tudományos Ertesítő, Agrártudományi Egyetem Gödöllő
 Tuinbouwberichten, Belgium
 Turrialba
 Two and a Bud

 Ugeskrift for Agronomer og Hortonomer
 University of Nebraska Quarterly
 Uzbekskii Biologicheskii Zhurnal

 Vakblad voor de Bloemisterij
 Växtodling
 Växtskyddsnotiser
 Vědecké Práce, Ovocnářské
 Vědecké Práce Výzkumného Ústavu Rostlinnej Výroby v Piešťanoch
 Vědecké Práce Výzkumného Ústavu Okrasného Zahradnictví v Příhonicích
 Vědecké Práce Výzkumných Ústavů Rostlinné Výroby v Praze-Ružyni
 Vegetatio

Vermont Farm and Home Science
 Verlag, Department van Landbouw, Veeteelt en Visserij, Surinam
 Verslagen van Onderzoek, Proefstation voor de Groenteteelt in de Vollegrond in Nederland te Alkmaar
 Versuchsergebnisse der Bundesversuchsanstalt für Alpenländische Landwirtschaft Gumpenstein
 Versuchsergebnisse, Höhere Bundeslehr- und Versuchsanstalt für Gartenbau, Wien-Schönbrunn
 Vestnik Leningradskogo Universiteta
 Vestnik Moskovskogo Universiteta, 6
 Vestnik Sel'skokhozyaistvennoi Nauki Kazakhstana
 Vestnik Sel'skokhozyaistvennoi Nauki, Moscow, USSR
 Victorian Horticulture Digest
 Vinodelie i Vinogradarstvo SSSR
 Virology
 Vitis

Wallerstein Laboratory Communications

Weather
 Weed Abstracts
 Weed Research
 Weed Science
 Weinberg und Keller
 West Virginia Agriculture and Forestry
 Western Fruit Grower
 World Agricultural Production and Trade
 World Crops
 World Review of Pest Control

Yalova Bahçe Kùltürleri Araştırma ve Eğitim Merkezi Dergisi
 Yearbook of Agriculture
 Yearbook, American Orchid Society

Zaadbelangen

Zahradnictví
 Zapiski Leningradskogo Sel'skokhozyaistvennogo Instituta
 Zashchita Rastenii
 Zaštita Bilja
 Zbornik Radova Poljoprivrednog Fakulteta
 Zeitschrift für Acker- und Pflanzenbau
 Zeitschrift für Angewandte Entomologie
 Zeitschrift für Pflanzenernährung und Bodenkunde
 Zeitschrift für Pflanzenkrankheiten und Pflanzenschutz
 Zemledelie, USSR
 Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, II
 Zeszyty Naukowe Wyższej Szkoły Rolniczej w Olsztynie, A
 Zierpflanzenbau
 Zöldségtermesztés
 Zöldségtermesztési Kutató Intézet Bulletinje

OTHER PUBLICATIONS OF THE COMMONWEALTH BUREAU OF HORTICULTURE AND PLANTATION CROPS

TECHNICAL COMMUNICATIONS

- T.C. 22 (Revised 2nd Edition). Sand and water culture methods used in the study of plant nutrition, by E.J. Hewitt, March 1966, pp. 547, 146 illustrations, bibl. 1813, £5.00 (\$13.00).
- T.C. 30. Virus diseases of apples and pears, edited by A.F. Posnette, December 1963, pp. 141, including 5 coloured and 30 half-tone plates, ring-binder cover, £1.75 (\$4.60).
- T.C. 30, Suppl. 1. Pear decline and moria, by E. Refatti, September 1967, pp. 8, 1 coloured and 1 half-tone plates, to fit existing ring-binder cover, £0.25 (\$0.70).
- T.C. 30, Suppl. 2, 3, 4, comprising Apple chlorotic leaf spot (supplement), by R. Cropley, pp. 5, 3 half-tone plates, Apple russet wart, by A.F. Posnette and R. Cropley, pp. 4, 3 half-tone plates, and Apple stem grooving, by O.A. de Sequeira and A.F. Posnette, pp. 4, 5 half-tone plates, 1969, to fit ring-binder cover, £0.50 (\$1.30).
- These four additional chapters are for inclusion in T.C. 30 mentioned above.
- T.C. 31. Abstract bibliography of fruit breeding and genetics to 1965. *Prunus*, by R.L. Knight, July 1969, pp. 649, £6.00 (\$15.60).
- T.C. 32. Abstract bibliography of fruit breeding and genetics, 1956-69. *Rubus* and *Ribes*, by R.L. Knight, J.H. Parker and E. Keep, February 1972, pp. 449, £8.00 (\$20.80).
- T.C. 33. Annotated bibliography on mist propagation of cuttings, by Jill E.K. Cox, January 1974, pp. 73, £4.00 (\$10.40).

RESEARCH REVIEWS

- R.R. 1. Specific replant diseases causing root necrosis and growth depression in perennial fruit and plantation crops, by B.M. Savory, March 1966, pp. 64 plus plates pp. 10, bibl. 204, £0.75 (\$2.00).
- R.R. 2. Crop responses to water at different stages of growth, by P.J. Salter and J.E. Goode, June 1967, pp. 246, 3 illustrations, bibl. 1194, £2.25 (\$5.90).
- R.R. 3. The biology of apple and pear storage, by J.C. Fidler, B.G. Wilkinson, K.L. Edney and R.O. Sharples, June 1973, pp. 235, figures, plates, bibl. numerous, £5.00 (\$13.00).
- R.R. 4. Root temperature and plant growth, by A.J. Cooper, April 1973, pp. 73, 38 figures, bibl. 245, £1.60 (\$4.20).

HORTICULTURAL REVIEWS

- H.R. 1. The sensitivity of ornamental plants to insecticides and acaricides, by J. Forsyth and J. Maynard, August 1969, pp. 66, bibl. 100, £1.00 (\$2.60).
- H.R. 2. Refrigerated storage of apples and pears—a practical guide, by J.C. Fidler and G. Mann, March 1972, pp. 65, 13 plates, 17 figures, £1.25 (\$3.30).

REVIEW ARTICLE REPRINTS

- Flower initiation in temperate woody plants. A review based largely on the literature of conifers and deciduous fruit trees, by D.I. Jackson and G.B. Sweet, pp. 16, 226 refs., 50p.
- Seed vigour and field establishment, by D.A. Perry, pp. 9, 127 refs., 50p.
- Wind damage in horticultural crops, by P.D. Waister, pp. 7, 76 refs., 50 p.
- Progress in the control of orchard pests by integrated methods, by A.H. Kirby, pp. 24, 120 refs., 50p.
- Research fields in the interaction of rootstocks and scions in woody perennials, by F.R. Tubbs, pp. 18, 178 refs., 50p.
- Waterlogging of fruit trees, by R.N. Rowe and D.V. Beardsell, pp. 16, numerous refs., 50 p.

OTHER PUBLICATIONS STILL AVAILABLE INCLUDE

- T.C. 24. The mulching of vegetables, 1957. P. Rowe-Dutton. £1.00 (\$2.60)
- T.C. 25. Abstract bibliography of fruit breeding and genetics to 1955. *Rubus* and *Ribes*—a survey, 1958. R.L. Knight and E. Keep. £2.25 (\$5.90).
- T.C. 27. Carbohydrate resources within the perennial plant. 1962. C.A. Priestley. £0.75 (\$2.00)
- T.C. 28. Graft-incompatibility in fruit trees, 1962. B. Mosse. £0.40 (\$1.00)
- T.C. 29. Abstract bibliography of fruit breeding and genetics to 1960. *Malus* and *Pyrus*, 1963. R.L. Knight £4.00 (\$10.40).

CAB JOURNALS

ANNUAL SUBSCRIPTION RATES 1974

The abstract journals form one part of the range of services in agricultural sciences provided by CAB and provide a total of well over 100 000 abstracts and citations by title each year. They constitute the only comprehensive coverage in English of the world literature on agriculture and related sciences and are available at prices well below the cost of production (except *Food Science and Technology Abstracts*) because CAB is subsidized by the contributing countries*.

The journals are produced by computer techniques, and a consolidated data base is created from which new services will be developed. Most journals are issued monthly, and in due course all data will be available on magnetic tape. The format of the journals has been designed to conform with international standards.

Title	Rate to	Rate to		
	Subscribers in contributing countries £	Subscribers in non-contributing countries £	\$U.S.	
<i>Review of Applied Entomology</i>				
<i>Series A. Agricultural</i>	10.00	26.00	67.50	M
<i>Series B. Medical and Veterinary</i>	4.00	10.00	26.00	M
<i>Bulletin of Entomological Research</i>	7.00	10.00	26.00	Q
<i>Review of Plant Pathology</i>	12.00	31.00	80.50	M
<i>Review of Medical and Veterinary Mycology</i>	4.00	10.00	26.00	Q
<i>Helminthological Abstracts</i>				
<i>Series A. Animal and Human Helminthology</i>	10.00	25.00	65.00	M
<i>Series B. Plant Nematology</i>	4.00	10.00	26.00	Q
<i>World Agricultural Economics and Rural</i>				
<i>Sociology Abstracts</i>	9.00	22.00	57.00	M
<i>Animal Breeding Abstracts</i>	12.00	30.00	78.00	M
<i>Veterinary Bulletin</i>	18.00	45.00	117.00	M
<i>Index Veterinarius</i>	18.00	45.00	117.00	M
<i>Dairy Science Abstracts</i>	12.00	30.00	78.00	M
<i>Forestry Abstracts</i>	16.00	40.00	104.00	M
<i>Horticultural Abstracts</i>	14.00	35.00	91.00	M
<i>Herbage Abstracts</i>	8.00	20.00	52.00	M
<i>Field Crop Abstracts</i>	10.00	25.00	65.00	M
<i>Nutrition Abstracts and Reviews</i>	18.00	45.00	117.00	M
<i>Plant Breeding Abstracts</i>	14.00	35.00	91.00	M
<i>Soils and Fertilizers</i>	14.00	35.00	91.00	M
<i>Weed Abstracts</i>	8.00	20.00	52.00	M
<i>Food Science and Technology Abstracts</i>				
(produced in collaboration with Institut für Dokumentationswesen, Institute of Food Technologists, PUDOC and Zentralstelle für maschinelle Dokumentation)				
	130.00	130.00	340.00	M

M – Monthly. Q – Quarterly.

All the above journals are obtainable (post free) from:

CENTRAL SALES BRANCH
COMMONWEALTH AGRICULTURAL BUREAUX
FARNHAM HOUSE, FARNHAM ROYAL, SLOUGH SL2 3BN, U.K.

Loss in Transit: Claims for numbers of any journal lost in transit will only be considered if notice of such loss is received within THREE MONTHS of the date of posting.

*The following Governments subsidize CAB: The United Kingdom of Great Britain and Northern Ireland, Canada, Australia, New Zealand, India, Sri Lanka, Ghana, Malaysia, Nigeria, Cyprus, Sierra Leone, Tanzania, Jamaica, Trinidad and Tobago, Uganda, Kenya, Malawi, Zambia, The Gambia, Guyana, Botswana, Bahamas, Mauritius, Swaziland, Fiji, Dependent Territories and the Republic of Ireland (Associate Government). The Associated States of the Eastern Caribbean have been invited to become members of CAB.